

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

A. Needs Assessment Process

This year, the Five-Year MCH Needs Assessment for the Federated States of Micronesia started in January 2005 and was completed in June 2005. Unlike the previous five-year needs assessment, it was conducted entirely by staff of the MCH Program and other staff of the Title V Agency, both at the FSM State and National level, who are stakeholders in the implementation of the FSM MCH Program. The actual assessment involves a team approach where a core staff (team) made up of the FSM National MCH Program staff, two FSM State MCH Coordinators who completed the MCH Training Program at the University of Hawaii School of Medicine, and members from the local communities, visited each of the FSM states, evaluated program related services that were provided to the maternal and child health population, and reviewed hospital and clinic statistics to ascertain medical and health problems facing the maternal and child health population.

It should also be mentioned that though the Pacific Open Learning Health Net (POLHN), a fully equipped computer room connected to the Internet through a leased T1 Line implemented by WHO and now fully function in each of the four FSM States, to a degree also enabled some of the MCH Program coordinators in the FSM states to take courses online related to program evaluation that then expanded their exposure on how to conduct needs assessment. This experience was most valuable when the team visited their respective states to conduct the Five Year Needs Assessment. If all goes well according to plan, the POLHN should continue to provide courses online for health workers to take courses online related to any field of interest without leaving their worksite. Similarly, the MCH Programs used the POLHN to facilitate and expedite the submission of all data required for the needs assessment and the annual plan components of the Title V Block Grant application due on July 15, 2005. In addition, the uploading of the Title V Block Grant is now more convenient because of this new technology or resource—the POLHN.

The purpose of the needs assessment exercise was to assess the progresses made during the past project cycle at the same time assist us to determine what priorities FSM should address during the next five years. The needs assessment activities involved review of the National Performance Measures, National Outcome Measures, Health System Capacity Indicators, State Negotiated Performance Measures and the State Outcome Measures. Workshops were conducted through out the four FSM States to facilitate such review. In depth review of the MCH Data Matrix was conducted in order for us to gauge the progresses made on each of the parameters based on the National Performance Objectives benchmarks set for each of the indicators for a particular time period. We were able to collect both quantitative and qualitative data to help us determine the percentage or rate of achievement or failure made and to understand the causes or reasons for such outcomes. The National and State MCH Program staff carried out the needs assessment and it was conducted in the following three phases: **Phase 1** – Planning the Needs

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

Assessment, **Phase 2** –Data Collection, **Phase 3** – Data Analysis, and **Phase 4** – Prioritize and Select Problem Areas.

PHASE 1: Initially, the planning for the need assessment started in April 2004 during the MCH and Special Education 2nd Joint workshop in Chuuk State. The National and State MCH Program staff, in collaboration with the Department of Education, Special Education Program and other Stakeholders, reviewed the survey questions designed for the conduct of the FSM SLAIT-TYPE Survey. Areas to assess and wording for questioning to ensure consistency were finalized. It was during this time when the MCH Program staff discussed what, how and when the needs assessment would begin. Subsequent discussions on the planning of the needs assessment were made between national and state program staff throughout the year. After first, we decided to request for Technical Assistance to assist us in the planning, audit and actual conduct of the need assessment. Such plan was not favorable by the Federal MCH Program staff, at our meeting during the AMCHP, and we were advised to request funding, instead and do the assessment ourselves. The final decision on the conduct of the need assessment was made after the AMCHP in February 2005, and included the following steps:

Step 1: Because the needs assessment is a multi-sectoral exercise, the assessment team discussed and identified the stakeholders to be included in the needs assessment. Since the Title V Program works with many other public and private agencies and programs in the community, these programs were asked to participate in the needs assessment. Some of the agencies in the FSM included: the Special Education Program of the Department of Education the Head start Program, the Dental Division, the Family Planning Program, community based nutrition programs such as the Family Food and Nutrition Program (FPPN), the State Statistician, parent groups, and other interested community groups. Since we were not able to secure the funds in time, and because we wanted to have as many representatives as possible to attend the workshops, we aborted our initial plan to bring people together in one place and assembled a team to travel to the four states to do the survey. The assessment team included; National MCH Program Coordinator, National MCH Program Assistant, NCD Epidemiologist, Chuuk MCH Coordinator, Chuuk CSHCN Physician and Kosrae MCH Coordinator.

Step 2: The assessment team also considered and identified the populations and the geographic areas to be included in the needs assessment. Because the unique geographic configuration of some of the states in the FSM, the needs assessment was performed for the “urban” areas that are close to the central populated areas and for the more remote and rural areas such as the lagoon islands of Chuuk and the outer islands of Pohnpei, Chuuk, and Yap states. The population that was assessed includes (a) Women of childbearing ages, (b) Pregnant women, (c) Mother of infants, (d) infants 0 – 1 year of age, (e) Children 1-14 years of age. (f) Adolescents 15 – 19, and (g) Children with special needs.

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

Step 3: The team reviewed the progress reports and needs assessments submitted by the state programs and identified the health status indicators for each of the populations for which data were to be gathered and assessed. Some of the health status indicators for each of the populations were to assess the mortality and common morbidity indicators. For children with special needs, the health status indicator may reflect the functional capability of the child as an indicator.

Step 4: As a result of our review and discussions of the States' progress reports and assessments we were able to define the health services indicators for each of the populations for which data will be gathered and assessed. The health service indicators were categorized by direct health care services, enabling services, population based services, and infrastructure building services. Some of the health service indicators assessed the availability of services, the access to health services, and the access barriers that prevent receiving health services. Surveys, focus group meetings and interviews *were* developed to collect data needed to assess the barriers to services. The health service indicators that were selected for measuring were indicators that can be changed and corrected.

Step 5: After the health service indicators have been defined, the assessment team was able to identify data sources for each of the indicators selected. Some of the data sources included were the Population Census, Vital Statistics, MCH program data, death certificates, birth certificates, clinic logbooks, and medical records. We were cautious in selecting the indicators to have some reasonable assurance that some level of data was available, therefore a method for collecting the needed data was developed.

Step 6: Finally, since the State MCH Programs completed and submitted the Data Matrix to National MCH Program before the assessment survey, the team reviewed and decided to conduct workshops in order for us to obtain other types of data information that were needed but were not collected or provided by the MCH staff. Since electronic data collection and compilation are not at the state of the art in the FSM, we reviewed records, interviewed people and conduct small group activities during the workshops in order to get what we needed. The State MCH Programs developed and conducted surveys and focus group meetings while the National MCH Program developed questionnaires and conducted face-to- face interviews in order to obtain the qualitative data needed in order to complete the needs assessment.

PHASE 2: Collecting the data was one of the major activities of the needs assessment. It was quite difficult to collect data since we do not have a good electronic system for collecting and compiling data in the FSM. Some of the data collected were not consistent with what was on record, and this was especially true when we reviewed the data from the previous years in order for us to come up with 3 year running averages to determine trends. It took us about two good months to collect the data and the process included the following steps:

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

Step 1: Because the data that were needed to be collected were in several areas, other program staff assisted the MCH Coordinators and the MCH Data Clerks in obtaining and compiling the required data. Some of the other program staff included the National and State Statisticians, Hospital Statisticians, Dental Services staff, Other Public Health Program staff, such as immunization, nutrition, Family Planning staff, the staff for the DOE – Special Education Program, and the Head start Program, Substance Abuse and Mental Health staff and the department of Public Safety.

Step 2: We focused the Data collection in two areas; quantitative and qualitative data. Quantitative data are essential because they help determine outcomes for each of the performance measures. However, they do not tell us why are we performing or not performing on a specific indicator, thus there is a need to collect qualitative data. For collecting quantitative data, we use the MCH data matrix forms to assure that data is consistent. The data definitions for the MCH data matrix were also used. For collecting qualitative data, focused groups meetings, surveys and face-to-face interviews were conducted. The Focus Group and survey questions were developed to qualify reasoning for the quantitative data collected. The CSN Survey was one of the tools developed to collect qualitative data to respond to the National Performance Measures relating to Children with Special Health Care Needs, which FSM has not been able to respond to for the past years.

Step 3: After we had decided to focus on collecting quantitative and qualitative data, we were concerned, not so much on collecting quantitative data, but on the kinds of qualitative data that we can collect. It should be noted that most of the quantitative data required for us were collected as reflected in the MCH data matrix. However, we were not able to collect qualitative data on all indicators but only on a few. For instance, only Kosrae and Chuuk States were able to conduct focus group meetings and surveys to provide qualitative data on the service outcomes. The State MCH Coordinators, technically, will need to review the data as it is being collected at the State level to assure that the data collected is collected in a useful format before it is submitted to the National level. In most cases, as it was this year, the data was not carefully reviewed and analyzed at the State level. Thus, the need assessment team reviewed the data to ensure that what was submitted were the data information useful or needed to conduct the needs assessment.

Step 4: After the data had been determined to be useful, the team reviewed the service levels of the MCH Service Pyramid in order to identify and list current services that are available in each of the areas. One of the important components of the needs assessment was to determine and list the availability and accessibility to health care services at each of the MCH service levels. This listing provided below was designed as a matrix with populations on one side and service level on the other side. This matrix was used as part of the analysis and interpretation as well as when selecting the issues and the problems.

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

	Pregnant	Mothers	Infants	Children	Adolescent	CSN
Direct Services						
Enabling Services						
Population based						
Infrastructure building						

PHASE 3: The assessment team did the initial analysis and interpretation of the provisional data, submitted by the state programs, prior to the commencement of the assessment survey. Final analysis and interpretation was made after the team had carried out the survey in all four states and collected all needed data. The analysis and interpretation process included the following steps:

Step 1: Because the data collected came in from many different sources, we requested the assistance of the National statistician, hospital statisticians, public health physicians and other clinical staff and education officials, specifically, Special Education and Early Childhood Education program staff in the analysis and interpretation of the data. Participation of the collaborating agencies is especially important since different programs may have different interpretation of their data sets.

Step 2: In order for us to validate the data collected for accuracy, we had to do a lot of editing since all the states submitted their data matrix based on the 2000 population census. The team felt that by using the 2000 population census figures, we would not be able to present useful data and this has implications when calculating appropriate frequencies, percentages, and rates to compare to other data sets. Since we were assessing the progresses made during the past project cycle, we believe that by using the 2004 projected population, based on the 2000 Population Census, we would be presenting updated and useful data information (denominator) critical for the calculation of percentages, rates and 3-year running averages to gauge progresses and shortfalls.

Step 3: In the analysis of the data, to gauge performance, the team compared the 2004 data (baseline data) with the National Performance Objectives for service indicators for 2004. The same data set (2004 data) was used to compare current outcomes with outcomes for the last four years to determine whether or not any progress (s) has been made. The maternal and child health data sets and the Healthy People 2010 Objectives were also used to determine progress made in 2004 as well as progresses made since the 2000 needs assessment.

Step 4: In analyzing the data set for 2004 and the preceding years, some degree of understand or sense of meaning for the numerical parameters evolved. It provided public health

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

meaning to the data by assessing the combination of the quantitative data, the qualitative data, and the service matrix to identify the issues, problems and priorities. The problems are defined as a health status problem, as a lack of a service, as a barrier to access, or as an administrative problem. Problems and issues are defined for each of the population groups and for the appropriate level of service.

PHADSE 4: The assessment of the quantitative data and qualitative data and the service matrix helped in determining priority areas and priority issues for the project cycle. This process was done by individual states during the needs assessment survey and repeated in a bigger group with different stakeholders during the 3rd MCH and Special Education joint conference this year.

Step 1: Because establishing priorities involve value systems, a variety of participants with different values provided different perspectives to the issues and problems. The participants who assisted in the prioritizing process included representatives from the four States' MCH Programs, representatives from the States' Department of Health Services – hospital services and public health clinicians and administrators, States' Department of Education – Special Education and Head Start Program, RSAs, Parent groups, Mental Health and Substance Abuse, National divisions of Health and Education.

Step 2: Because there are many different ways to prioritize, the group used a “Reaching Consensus Exercise” model, adopted from a prioritizing exercise during the 2005 AMCHP Conference, to come up with a priority list. The format used in deciding on the issues included presentations, whole group work and discussions, small group work and discussions and delineation exercise. At the end of the process, the group came up with a list of priority areas and priority issues that the MCH Program will track for the next five years.

B. Five Year Needs Assessment

1. Assess Needs

In April this year, the FSM MCH Program conducted a five-year needs assessment. The purpose of the needs assessment exercise was to assess the progresses made during the past project cycle at the same time assist us to determine what priorities FSM should address during the next five years. The needs assessment activities involved review of the National Performance Measures, National Outcome Measures, Health System Capacity Indicators, State Negotiated Performance Measures and the State Outcome Measures. Workshops were conducted through out the four FSM States to facilitate such review. In depth review of the MCH Data Matrix was conducted in order for us to gauge the progresses made on each of the parameters based on the National Performance Objectives benchmarks set for each of the indicators for a particular time period. The group used a “Reaching Consensus Exercise” model, adopted from a prioritizing exercise

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

during the 2005 AMCHP Conference, to come up with a priority list. A listing of Public MCH Service areas was also adopted and used. The format used in deciding on the issues included presentations, whole group work and discussions, small group work and discussions and delineation exercise. The needs assessment showed that there remained some important deficiencies, within the health care system, and to some specific health issues that the MCH Program needs to focus its resources and activities as its priorities. The issues require the FSM government to provide coordinated and persistent array of social, medical and preventive services to improve the health of the women, mothers, infants and children who make up at least 90% of its total population. The findings suggest that there remained some deficiencies for each of the population groups and for the appropriate level of service within the MCH Program in the FSM. Although there may be varying fluctuations by state for the corresponding indicators, there has not been any significant improvement since the last needs assessment in 2000. The trends are more or less stabilized when analyzing the data based on a three year running average.

Since the last needs assessment in 2000, the MCH Program has conducted annual workshop. During these workshop, the MCH Program coordinators and staff from each of the FSM States and the National discussed issues such as AMCHP meetings, legislative updates, and writing of work plans. The work plans set out what each of the MCH Program coordinators would do for the priorities already set out. Together, they reviewed the work plans, discuss ways to track progress, and agreed on timeline for reports to be submitted. When the agreement was made, the FSM National MCH Program allotted the funds to the respective State MCH Programs to carry out the activities.

Unless the FSM Government says otherwise, this system will be followed in allotting funds to the respective State programs. The process in setting work plan will also be followed.

The needs assessment leads to the next set of priorities. In addition, the needs assessment also enables the MCH Program to assess or re-evaluate its current priorities and what priorities should be set for the next future intervention years.

In terms of priority, the FSM MCH Program will focus its strategies, interventions and resources on the selected priorities identified herein below. It should be noted that FSM completed a CSN Survey in January 2005 however, it only provided partial information needed to conduct a thorough needs assessment. The purpose of the CSN survey was twofold: (1) to collect enough information so that the FSM MCH Program would be able to respond to the new five performance measures and (2) that the FSM MCH Program, while conducting the survey, also collects other pertinent information that were not normally collected by its supporting partners such as Special Education Program or Head Start Program to better understand how children were served and how the programs could improve their services.

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

Totalling eleven pages in length, the questionnaire was designed to contain both open-ended and close-ended questions. The questionnaire was designed to elicit responses toward understanding the demographic characteristics of the children with special health care needs, their functional health status, access to care, coordination of care by their providers and caretakers, how satisfied the caretakers were with the services their children received from providers, the impact of caring for their children on the rest their family, and their ability to pay for services for their children in terms of health insurance.

The specific questions were derived after reviewing what information the FSM MCH Program and its local agency partner (FSM Special Education Program) would need to know in order to improve its services. The CDC SLAITS survey that the MCH Programs in the US states normally conducted on the telephone was reviewed for guidance, but it was felt impractical to conduct it in the FSM because of logistical problems and the fact that access to telephone is limited.

The actual data collection included a face-to-face interview with the parents of the CSHCN where each parent was asked to respond to the questions asked by the interviewer. The interviewers were staff from both the MCH Program and the Special Education Program.

After designing the questionnaire, each of the FSM states had a chance to pilot the questionnaire to test how long it would actually takes to complete it as time was a key consideration. A training was also provided by the FSM MCH National Program to each of the FSM states before conducting the survey to make sure interviewers, who were both the MCH Program staff and the FSM Special Education Program staff, understand what each of the question was meant to ask.

In addition, each parent who concurred to participate in the survey gave a written consent and vouched by the interviewer.

For the bigger FSM states (Chuuk and Pohnpei) it was decided to target at least 30% of each of the FSM states' total number of registered CSHCN while for the small FSM states (Yap and Kosrae), it was decided to target the total number of registered CSHCN.

EpiInfo 2000 was used to enter the data and generate statistical tables. Two data clerks from the FSM Department of HESA both entered the data on two separate PCs and then merged both files for cleaning and analysis.

This survey provides some preliminary information for the Title V Block Grant Agency (the Federated States of Micronesia) to be able to report on the five new performance measures now required. Though the design is different from a random dialing system survey normally used in

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

the U.S. states, the design of the survey was appropriate in the FSM circumstances after considering numerous challenges and barriers.

This survey not only provided the needed information, but it also established a true partnership among the MCH Title V Program staff and the other agencies such as Special Education and Head Start that also serve the same population.

The findings suggest that the users of services provided by the programs not only need to be improved, but were not available during the times they needed them.

Now that the needs assessment is done, coupled with the CSN survey, FSM is able to articulate its next set of priorities based on evidence and data.

The FSM-SLAIT type survey, in contrast with the regular SLAIT Survey, which was a telephone interview, was a face-to-face interview of parents and legal guardians of the children with special health care needs. The survey was aimed at the first six National Performance Measures relating to children with special needs, which the FSM has not been able to respond to in the past years. The FSM-wide MCH Needs Assessment Survey was completed during April 2005. The purpose of the Assessment was to determine the service requirements within the FSM. The study was aimed at determining; 1) What was essential in terms of the provision of health services, 2) What was available, and 3) What was missing. The findings of the Needs Assessment Survey were presented during the MCH and Special Education Joint Workshop during the month of May in Kosrae State, during which time the Priorities for the next five years were selected.

Based on the 2004 estimated projections on the 2000 Census, the total population of the FSM stands at 112,700 residents. The distribution of the population among the four states shows that the state with the smallest population is the State of Kosrae with 7,920 residents (7% of FSM total); the next largest population is in the State of Yap with 11,320 persons (10% of FSM total); Pohnpei state has a total population of 35,535 (31.5% of FSM total); and the largest population is in the State of Chuuk with 55,768 residents (49.5% of FSM total). Of this total population of 112,700, there are 25,375 women of child-bearing years of 15-44, which is 22.5% of the total population. Of this total population of child-bearing age women, there are 3,806 women between the ages of 15-17 years.

PREGNANT WOMEN - During 2004, there were 2,244 women who were provided prenatal care and who delivered an infant. Of these 2,244 women, 118 were between 15-17 years of age. Of these women, only 486 (20.1%) received early prenatal care during this year. In 2002, 32% of the women received early care and in 2003, 30.8% received early care. This indicator has

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

been traditionally low, however, this year appears to be the lowest percentage of women so far. In assessing the Health Status Indicator #3 that measures the number of women who receive at least 80% of their expected number of prenatal visits, 46.3% of the women are receiving those visits, however, this indicator only measures the ratio of observed to expected visits and gives a distorted perspective in that many of these women have initiated care late during their pregnancy. When assessing the data to measure the full Kotelchuk Index for Adequacy of Prenatal Care Services and taking into consideration the early initiation of prenatal care and the ratio of observed visits to expected visits, only 28.7% of the women have received “adequate” care, 39.2% have received “intermediate” care, and 30.4% received “inadequate” care.

Of the infants born in 2004, 6.7% were low birth weight, 0.5% were very low birth weight and 42 infants died for an infant mortality rate of 17.5/1000 which is a decline from the 2003 IMR of 22.6/1000, the 2001 IMR of 21.8/1000, and the 2000 IMR of 17.7/1000. Of the infants who died in the neonatal period, the most common causes were prematurity and congenital anomalies. Of those infants who died in the post-neonatal period, an acute infection was the major cause followed by complications of malnutrition. Because of the association of prenatal care and infant mortality, there is a need to improve the rates of women receiving adequate prenatal care and that the prenatal care services need to be improved and provided in a consistent manner. Of all the 2,415 infants born in 2004, 6.7% were low birth weight (LB) and 0.5% were very low birth weight (<1500 grams). Though the may have slightly decreased from 1999 (0.9%), the overall proportion of low birth weight babies has increased and public health intervention activities need to be strengthened, not lessened.

The nutritional status of pregnant women is a critical factor in determining the health of the pregnancy, therefore, there was an attempt to obtain data related to nutrition and pregnancy. All four states reported that all women who attend prenatal care clinics do receive nutrition education services, however, there were no protocols or procedures for nutrition education so the quality of the education depended on the nurse and there was no consistency or quality assurance. The determination of the hematocrit level is one of the routine services that should be provided at the first prenatal visit. However, the MCH Coordinators reported that this service is not consistently provided and sometimes is not done because of lack of supplies. For those women who have low hemoglobin, iron supplements are provided, however, there is no monitoring of whether these women are taking the supplements and a repeat follow-up hematocrit is not performed until the woman is in the labor room. Of the 2,244 women who received prenatal care, 93.9% were screened for low hemoglobin and out of those screened 34.7% were diagnosed with anemia. This reflects a 4.9% increase from 2001, which is 29.8%. Also, 80.1% of pregnant women were screened for hepatitis B and 5.4% were positive, a decrease from 2001, which is 6.2%.

Fewer women received Pap smear (34.4%) in 2004 compared to in 2001 (45.5%). Of those

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

received Pap smear 5.3% were positive, a decrease from 2001, which was 8.6%. Neonatal mortality increased in 2004 at the rate of 14.7/1000 as compared to 9.7/1000 in 2001.

The Chuuk state MCH Program has conducted focus group on the pregnant women to find out why women come in late in their trimester. Different groups of pregnant women were interviewed; one group with early trimester and the other with late trimester. The focus group sessions focused on questions to determine the types of barriers that the women faced that caused them to come in late in their trimester. Factors leading to late prenatal care include, 1) transportation, 2) no baby sitter, 3) no health problem, 4) local medicine and 5) no family support. A set of questions was asked to both groups. One set of question was focused on factors contributing to early prenatal care. Group I indicated that they come in early because they wanted to know if the baby was healthy and wanted to know about their own health, that they have complications in previous pregnancy, family support for early visit, had health problems before, first pregnancy and very much wanted the pregnancy and that they had good pregnancy outcome before and wanted the same. Another set of question was focused on factors contributing to late prenatal care. Group II indicated that they come in late because they are not aware of pregnancy, due to hyper emesis until 6-7 months, no baby sitter, no transportation, no point in coming in, clinic not accessible and that no family support. In assessing the Health Status Indicator #3 that measures the number of women who receive at least 80% of their expected number of prenatal visits, 63% of the women received those visits, however, this indicator only measures the ratio of observed to expected visits and gives a distorted perspective in that many of these women have initiated care late during their pregnancy. When assessing the data to measure the full Kotelchuk Index for Adequacy of Prenatal Care Services and taking into consideration the early initiation of prenatal care and the ratio of observed visits to expected visits, only 19% of the women have received “adequate” care, 15% have received “intermediate” care, and 78% received “inadequate” care. During 2004, there were 954 women who were provided with prenatal care services of which only 200 or 18% initiated care during the first trimester.

In Chuuk, there were 1,096 infants born in 2004. Of the total new born, 44 infants were born to teenagers, ages 15-17. Of the total infants born, 0.8% was low birth weight and **there is no record for very low birth weight**. The Infant mortality rate for 2004 is 20/1000 a big decrease from 2001, which is 35.5/1000. The data for 2004, although is still high, it represents a declining trend from 2001; however, care must be taken in making an interpretation because of the questionable validity of the birth certificate and death certificate data and the statistical anomaly of the problem with “small number”.

For Chuuk state, in reviewing the cause of death of infants in the neonatal period, it was revealed that the major causes of death were prematurity, infection and malnutrition. The neonatal mortality rate for Chuuk in 2004 is 15/1000. The 2004 rate is higher than in 2003

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

(13.8/1000) and 2002 (13.6/1000), but lower than in 2000, which is 20.6/1000. Although studies have not been conducted to show the association between the marginal nutritional status of the pregnant women and the adverse outcomes of the pregnancies, clinical data shows that there is a high incidence of iron deficiency anemia among the pregnant women, Vitamin A intake is low, and the diets are marginal. It is suspected that nutritional status does make an impact on not only the high fetal wastage but on the sick newborn as well.

The Kosrae state MCH Program conducted focus group meetings and survey of pregnant women to determine some qualitative information of why pregnant women come in late for their first prenatal care. The focus group involved ten pregnant women who shared their thoughts in reasoning barriers for early prenatal care and late prenatal care. Of those attended the focus group sessions, 70% indicated that pregnancy is just a normal process of women in life unless physical dysfunctions occur then they seek prenatal care service. Aging was another reason for delayed early prenatal care visits. These mothers felt ashamed because women getting pregnant today are in their early child bearing age.

A survey was also conducted to determine barriers for early prenatal care services. Among pregnant mothers receiving prenatal care service in 2003 and 2004, 52 pregnant mothers were surveyed. Of those surveyed, more than 75% were those who came in their late 2nd and 3rd trimester and multiple gravida and para. Based on the survey, the following are the barriers and percentage of respondents; 29% indicated gender preference of service provider, 28% indicated service cost, 16% indicated by personal choice, 9% indicated no health problem, 9% transportation, 4% indicated no baby sitter, another 4% indicated community involvement, .5% indicated use of local medicine and another .5% indicated that PNC is not as important. Another set of questions was focused on service satisfaction. Out of the 52 pregnant women surveyed, more than 80% indicated that they were satisfied with services provided during prenatal care. More than 60% of those indicated satisfaction with services claimed satisfaction was due to health education information and moral support provided at the clinic. Another set of questions was focused on missing appointments during prenatal care. “Forgetful” seemed to be the number one barrier to missing appointments during prenatal care services for pregnant mothers.

In assessing the Health Status Indicator #3 that measures the number of women who receive at least 80% of their expected number of prenatal visits, 60% of the women received those visits, however, this indicator only measures the ratio of observed to expected visits and gives a distorted perspective in that many of these women have initiated care late during their pregnancy. When assessing the data to measure the full Kotelchuk Index for Adequacy of Prenatal Care Services and taking into consideration the early initiation of prenatal care and the ratio of observed visits to expected visits, only 15% of the women have received “adequate” care, 9% have received “intermediate” care, and 76% received “inadequate” care. During 2004, there were 954 women who were provided with prenatal care services of which only 200 or 18%

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

initiated care during the first trimester.

In Kosrae, of the 168 infants born in 2004, 5 infants were born to teenage mothers. Of the 168 infants born, 6% were low birth weight and 0.6% was very low birth weight. The Infant mortality rate for 2004 is 12/1000 a big decrease from 2001, which is 38/1000. The data for 2004, although is still high, it represents a declining trend from 2001; however, care must be taken in making an interpretation because of the questionable validity of the birth certificate and death certificate data and the statistical anomaly of the problem with “small number”.

The FSM has adopted the WHO policy of assuring that infants are exclusively breastfeeding for the first six months of life and that solid foods are introduced at six months with the continuation of breastfeeding until one year of age. Because of this policy, mothers who deliver a live born are encouraged and supported to breastfeed while in the hospital and mothers are not discharged until the infant is breastfeeding well. For those medical situations where the infant is unable to breastfeed, formula is provided only with a physician’s recommendation and prescription. Therefore, in 2004, in the four FSM states, 93.7% of the infants who are discharged from the hospital are exclusively breastfeeding. However, by one-month age there appears to be a decline in the number of exclusively breastfed infants and by six months of age, only 56% of the infants

are exclusively breastfeeding. Data collected at the Well Baby Clinics in Yap state show that at one month age 132 infants are breastfeeding with 5 being supplemented with the juice from young coconuts or water. At 2 months of age 16 infants are exclusively breastfeeding and the number of infants being supplemented with water has remained the same. So, in Yap state, by 6 months of age only 5 infants are exclusively breastfeeding and 8 are being supplemented, 2 are being given formula during the first two months after discharge and 1 is being given formula and solid foods at six months.

	1 mo	2 mo	4 mo	6 mo
BF	132	16	14	5
BF+Sup	5	5	9	8
Form	1	1		
Form+Su p			1	

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

CHILDREN AND ADOLESCENTS - According to the 2004 projected population estimates based on the 2000 Census, there are 66,207 persons between the ages of 0 through 20 years which comprises 58.7% of the total population in the FSM. Of this population of persons less than 20 years of age, 42,111 are 14 years old and under and 13,357 are between 15 and 19

Age	Pohnpei	Kosrae	Chuuk	Yap	Total
0-4	5038	1026	7347	1372	14783

years of age. The population in the FSM is a relatively young population where 37% of the total population is made up of children between 0-14 years of age. The overall health status of this childhood population reveals that many children are still being seen in the emergency room (ER) and outpatient department (OPD) as well as being hospitalized for common infectious illnesses. For example in

Pohnpei state, for October to December in 1999, the data from the ER/OPD reveals a total of 7892 encounters for children in the 1-14 year old age group. Of these children 1244 visits were for acute respiratory infections, 795 for acute gastroenteritis, 137 for visits related to injury, and 83 visits for asthma. During the same time period, there were 146 children between the ages of 0-24 years who were admitted to the hospital. Of these, 75 admissions were to infants under one year of age of which 10 were for acute gastroenteritis, 65 for acute respiratory infection, and none for malnutrition. In the 1-4 year age range there were 56 children of whom 44 were for acute respiratory infection, 11 for acute gastroenteritis, and one for malnutrition. There were 15 children between 1-24 years of age who were admitted for injuries due to motor vehicle accidents.

The percentage of third graders with protective sealants was increased in 2004 at 60% compared to 43% in 2001. Pohnpei state has the highest mark of 98% followed by Kosrae (60%) and Yap (43%). Chuuk State has the lowest mark at 34%.

There has not been any major activity or up to date survey conducted in the FSM that can provide us with updated information regarding the dental health of the population that we serve. The most recent and comprehensive studies were the surveys conducted in Chuuk state by Dr. T.H. Aye in 1996-1997 and Dr. M. Takagaki, DDS, from a volunteer agency in Japan, in Kosrae in October 1998 to February 1999. Both dental surveys continue to show high prevalence of dental disease among the children in the FSM and remain one of the major public health problems in all four states of the Federated States of Micronesia.

In 1991, a subsequent study of dental resources showed that for the four FSM states, there were four Dental Officers, 25 Dental nurses, and 9 Dental Assistants. Since that time, little has changed in the availability of and access to dental services for children. In 2004, the

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

assessment of dental resources in the FSM showed that there are 14 dentists, 14 dental nurses and 16 dental assistants, with a total of 38 staff.

In Kosrae, in the infant age group (0-5 years) the number of illness was increased in 2004. There were 468 infants hospitalized in 2004 compared to 303 infants in 2003. The most common causes of hospitalizations were dehydration at 31%, asthma at 17%, B. pneumonia at 16%, injuries at 9%, gastroenteritis at 8%, respiratory at 7%, skin disease at 4%, parasitism at 3%, urinary at 2.6%, dengue fever at 2% and musculetal pain at 0.4%.

For dental caries, 1,676 students from three schools were screened in 2004. Out of those screened, 1,622 have dental caries and 54 are free of caries. Based on the data received from Kosrae Head Start Program, 100% of the 45 students enrolled in 2004 and 2005 school year were screened for dental caries. Of the total screened, 341 teeth were decayed, 65 teeth were filled and 24 teeth missing.

There has not been any up to date survey conducted in the FSM that can provide us with updated information regarding Vitamin A deficiency and iron deficiency anemia since the survey that was conducted in January and February 2,000 by the CDC and Prevention, UNICEF Pacific and the FSM Health Department. The survey assessed the Vitamin A and iron status of 24-59 month old children and their mothers or adult female caregiver in Kosrae and Yap Proper. Serum Vitamin A was measured on 287 children and 207 women from Kosrae and 218 children and 154 women from Yap Proper. The results showed that in Kosrae 57.7% of the children and 58% of the women were deficient in Vitamin A and 13.4 % of the children and 14.4% of the women had low hemoglobin. For Yap Proper 38.1% of the children and 11.7% of the women were deficient in Vitamin A and 11.0% of the children and 18.1% of the women had low hemoglobin. These data clearly indicate the need for programs to address the problems of Vitamin A deficiency and anemia in these two states. Vitamin A supplementation programs are currently in place in the states of Chuuk and Pohnpei. In 2004, in Kosrae state, the percent of women with low hemoglobin since the survey has decreased to 10.6% while slightly increased to 22.9% in Yap. Although there are no data available to assess the status of women and children with vitamin A deficiency, it is apparent that vitamin A deficiency in pregnant women has negative impact on birth outcomes, and poor health status of children. Thus, in 2004, the percent of children with low birth weight in Yap was decreased to 12.9% from 38.1% in 2000 and also decreased in Kosrae to 4.8% from 57.7% in 2000.

CHILDREN WITH SPECIAL NEEDS - Of the child population 0-21 years of age who are potentially eligible for services from the Children with Special Needs Program, there are a total of 704 children registered in the CSHN data base in the four FSM states. These are children who have been screened by various community programs, referred to the CSHN Program, have a completed assessment or in the process of receiving an assessment. The CSHN is based on an

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

interdisciplinary model that uses a team made up of representatives from the Special Education Program, the Head start Program, the Public Health Nurse, the physical therapist, the nutritionist, and the physician and specialty physicians when available. Because of the shortage of staff in all of these areas, it is very difficult to bring the team together to conduct an interdisciplinary assessment, develop the treatment plan, provide the services, and provide the follow-up needed for these children. Many of these services for these children are provided in the home setting (homebound program) because of the difficulty of transporting these children to the school or to the clinic site. Another difficulty is that not only is there a shortage of staff, but in several of the areas, the staff that is available have not been trained to provide these special services to the children with the special needs. There are also many gaps in the services delivery system for children with special needs because of the lack of trained personnel to provide the specialty care that is required. Orthopedic services are provided by Shriner's Hospital for Children in Honolulu who provide orthopedic screening and treatment services once a year. A pediatric cardiologist also makes an annual visit to the four FSM states and provides diagnostic and follow-up care for children with cardiac problems. There are no pediatric neurologists, developmental pediatricians, pediatric ophthalmologists, occupational therapists, audiologists, nor pediatric nutritionist with specialized training in serving children with special needs.

2. Examining Capacity

The State Title V Agency is in the FSM National Government, which is physically located at Palikir on the island of Pohnpei, six miles away from Kolonia, the center of the state government, and the major commerce and business center of Pohnpei state. The national government, patterned after the U. S. democratic government, has three branches - The Executive Branch, The Judiciary, and the Legislative Branch. The three branches of the government were re-organized in January 1998. This re-organization merged the former Departments of Health, the Department of Education, and the Historic Preservation and Archives Program into a new Department of Health, Education and Social Affairs (HESA).

For the purposes of receiving U. S. Federal Domestic Assistance, the National Government is designated as the "State Agency". However, all funds approved by the U. S. Federal Government to support MCH Title V and allocated to the FSM Government are further allotted to each State MCH Program by way of Allotment Advices issued by the National FSM Office of Budget, now under the administration of the new Department of Finance and Administration.

Each of the State MCH Program collaborates with the local departments of education, agriculture, social services, Land Grand Nutrition Program annexed to the College of Micronesia-FSM, and Women Interest Officers Program. The collaborations focus on promotion of Vitamin A and nutrition, support services to promote exclusive breastfeeding and parenting

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

skills. Other collaborations with the private organization such as Head Start Program and private schools focus on early dental care services. Through the Immunization Program, the MCH Program in Pohnpei State also collaborates with the Genesis Clinic and the Pohnpei Family Health Clinic by providing vaccines free of charge. In return, the clinics provide immunization data, which is one of the outcome measures for the MCH Program.

Within each of the four states, under the direction of the State Director of Health, the Primary Health Care Services administers the MCH Title V Program. The MCH Programs provides primary care and preventive services to pregnant women, mothers and infants; preventive and primary care for children; and services for children with special health care needs. In FY 2000 there were 36 full-time staff and in FY 2004 there were 32 full-time staff in the four FSM States funded by the Title V Program. These include three full-time MCH Coordinators for Chuuk, Kosrae and Yap, the CSHN Coordinators for Pohnpei and Kosrae states, as well as staff positions such as nurses, health educators, health assistants, dental assistants, and clerical staff. The MCH Coordinator for Pohnpei state is funded by Pohnpei State Government. In FY 2006 we request to increase the number to 34 full-time staff, to include a CSHCN Physician and a Nutritionist. FSM has a total of 38 dental staff, among these are 14 dentists, 14 dental nurses and 16 dental assistants. Out of the 38, the MCH Title V Program funds five (5) dental assistants. The Public Health Department provides all of the preventive and primary health care services at no cost to the clients. The staff of the MCH Programs works closely with the staff from other programs to provide the full array of services. Some of the other programs that collaborate with the MCH Program include the family planning program, the immunization program, the school health program, the prenatal care program, and the STD program.

During the past years, there have been several changes in the leadership of the MCH and CSHN programs at the state level. In 2000, both Pohnpei state and Yap state replaced their MCH Coordinators. The only incumbents that have been stable are the MCH Coordinator and CSHN Coordinator in Chuuk and the CSHN Coordinator in Yap. These changes in the MCH and CSHN programs have led to a lot of instability in the two programs at the state level. Progress in the implementation of the policy and procedures and services for the Comprehensive Well Baby Clinics and the Children with Special Needs Programs has been significantly hindered because of the need to continually re-orient and re-train new staff.

In 2004, the Pohnpei State MCH Coordinator was reassigned to a new position of Public Health Nurse Supervisor. In 2005, Pohnpei State CSN Coordinator left for the Immunization Program and Kosrae State's MCH Coordinator accepted a new position of Chief, Division of Public Health. The positions in Pohnpei State are being advertised and we hope to fill them soon. However, two other public health staffs are being selected to look after the programs on a day-to-day basis. The MCH Coordinator position in Kosrae will be advertised soon and the incumbent Coordinator is still looking after the program on a day-to-day basis.

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

Training and education for the coordinators has continued at three levels: (1) Individual on-site consultation has been provided twice a year for the MCH Coordinators and CSHN Coordinators in the four states on developing policy and procedures, program implementation, data collection, data analysis and interpretation, and improving data capacity. (2) The Annual MCH Workshop was held in April 2002 and brought together the MCH Coordinators, the MCH Data Clerks, the CSHN Coordinators, and staff from the National Government's Health Department where issues were discussed related to improving state data capacity and early intervention services for children with special needs. (3) Special conferences and other educational opportunities were provided to two of the MCH Coordinators who attended the University of Hawaii's MCH Certificate Course, the CSHN Coordinators attended the Pacific Basin Interagency Leadership Conference, and MCH Coordinators attended the PACRIM Conference in Honolulu in 2003.

Also during this year, a workshop was held with the FSM Special Education Program where staff from both programs came together and discussed ways to improve services provided to children with special health care needs. From that workshop, the two programs agreed to carry out a joint survey to determine how parents or caretakers perceive the services their children are getting from the programs (see copy of the questionnaire attached).

The MCH Coordinators, CSN Coordinators and MCH Data Clerks attended the Annual FSM MCH and Special Education Joint Workshop held in Chuuk during April 2004 and in Kosrae during May 2005. The two MCH Coordinators who attended the University of Hawaii's MCH Certificate Course completed the program in March this year. These two staff gained new skills and insights ranging from program planning, management, evaluation and needs assessment. This will contribute to how the FSM MCH Program provides services to women, infants and children. The CSHN Coordinators attended the Pacific Basin Interagency Leadership Conference in February this year, and MCH Coordinators attended the APNLC Conference in Honolulu in June this year.

The Assistant Secretary for the Division of Health, former National MCH Coordinator, continues to receive educational training in epidemiology through a program at the University of Michigan School of Public Health to fill some of the needs that are critically needed by the MCH Program and by the FSM Department of HESA. Two Physicians, one each, from Chuuk and Kosrae States, who have been helping out with the MCH and Family Planning clinics, have been accepted for the UH MCH Training Program. These two staff will gain new skills and insights ranging from program planning, management, evaluation and needs assessment. This will contribute to how the FSM MCH Program provides services to women, infants and children.

Also during the past four years, four MCH Data Clerks were added to the four state programs through SSDI Project funding to improve the collection of MCH related data within the states.

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

The data clerks are deployed to the state Medical Records Department and have the primary responsibility for assuring the completion and accuracy of the birth certificates, the fetal death certificates, the infant death certificates, and the pediatric death certificates. The data clerks are also responsible for manually "linking" the infant death and birth certificates. These linked certificates are then given to the MCH Coordinators for analysis and interpretation.

The Chuuk MCH Program provides all of the preventive and primary health care services for pregnant women, post-partum women, infants, and children. Pregnant women are provided with prenatal care services twice a week at the central prenatal clinics in Public Health section of the Chuuk State Hospital. The first prenatal care visits are provided on Tuesdays where women are screened for pregnancy risks, hepatitis, Pap smear, and anemia. Revisit prenatal care services are provided on Thursdays for routine prenatal care where nutrition education, dental services, and physician services are provided. High-risk prenatal clinics are also provided on Thursdays. The Health Assistants in the field provide prenatal care to women in the out-lying islands. Family planning services are provided to those women who attend the post-partum clinics. Well baby care services are provided to infants in Public Health once a week. Services at this clinic include growth monitoring, developmental screening, immunization, nutrition education and counseling. The physician provides physical assessments to all infants who attend the clinic. Services for children are primarily immunization services that are provided both at Public Health and well as by outreach teams in the outer islands. Preventive dental health services are also provided for the children in the schools using staff from the Dental Division and the MCH Program. Children with special needs are seen at a weekly CSHN Clinic by the CSHN physician who provides the medical and health care to the children with disabilities. The program staff also provides services to the children and families in the home when warranted. The CSHN Program has been developed as an interagency effort among the MCH Program, the Chuuk State Hospital, the Special Education Program, and the Head start Program.

The Kosrae MCH Program provides all of the preventive and primary health care services for pregnant women, post-partum women, infants, and children. Pregnant women are provided prenatal care services on Tuesdays and Thursdays of each week at the Public Health section of the Kosrae State Hospital. The first prenatal visits are scheduled for Tuesday and the services include monitoring of weight and blood pressure, hematocrit for anemia screening, fasting blood sugar, and Uri analysis. The women are also screened for Hepatitis B, STD's, and cervical cancer with a Pap smear. The tetanus booster is updated and is provided with a physical examination by the physician. Pregnant women who meet the criteria for high risk are referred to the high-risk clinic on the Thursday morning. All the revisits are also done in the Thursday morning clinic. Mothers who have delivered attended the post-partum clinic one month after delivery and are provided with hematocrit screening, blood pressure and weight check, and physical examination. Women are then encouraged to attend the family planning clinic for contraceptive services.

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

Well baby care services are provided on a weekly basis and include growth monitoring, developmental screening, nutrition education, breastfeeding, and immunization. The Children with Special Needs program provides assessment and follow-up services for infants and children who are referred with handicapping conditions. For children who are homebound, the CSHN team will make home visits to provide medical and educational services.

The Pohnpei Health Services has three divisions- Primary Health Services Division, Dental Services Division, and Medical Services Division all operating under the State Director of Health Services. The Primary Health Services Division includes all of the dispensaries on Pohnpei proper and also those on the outer islands. Each dispensary is staffed with a health assistant and a nurse. A physician provides medical and consultative services to the dispensaries with visits at least 2-3 times a week. The Medical Services Division provides inpatient services, emergency room services, as well as primary care services through the outpatient clinics. The inpatient services include acute medical care on the medical ward, surgical ward, obstetrical ward, pediatric ward, and newborn nursery. The mental health services are situated outside of the hospital in a building across the street and operate under the supervision of the Chief of Primary Health Services. The CSHN Program is an interagency effort among the MCH Program, the Special Education Program, the Head start Program, and the physician and physical therapist from the hospital. The Pohnpei MCH Program provides all of the preventive and primary health care services for pregnant women, post-partum women, infants, and children.

The MCH Program provides prenatal care, post-partum care, immunization, and children with special needs services. Pregnant women are seen in the prenatal clinics based on their risk status. Services provided during prenatal care include physician examination, weight and blood pressure monitoring, Uri analysis, hematocrit, Pap smear, Hepatitis B screen, and STD screen. Preventive services include prenatal vitamins, iron, diet and nutrition counseling, and care during the pregnancy. Post-partum services are scheduled with the Public Health Clinic at the time that a woman is discharged from the hospital after the delivery. At the post-partum visit, both mother and infants are examined, mother is counseled on breastfeeding, and the mother is referred to the family planning program for counseling and contraceptive services. The infant is given an appointment for the immunization clinic. The Children with Special Needs program provides clinical assessments and follow-up with the physician through the CSHN Program Coordinator. The Pohnpei CSHN Program is an interagency effort among the MCH Program, the Special Education Program, the Head start Program, and the physician and physical therapist from the hospital.

The MCH staffs are part of the teams from Primary Health Division that conduct health screening of children in schools each year. During these screenings, weight and heights are taken, a physician, health assistant, or Medex conducts a physical examination, and visual screening is also done. There are field trips that take these teams to the outer islands to conduct

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

these screenings, however, not on a regular basis.

The Yap MCH Program provides all of the preventive and primary health care services for pregnant women, post-partum women, infants, and children. Prenatal care services are provided by the MCH Program on Tuesday, Wednesday, and Thursday of every week. In the outer islands, pregnant women are seen by the health assistants and women who are identified as high risk are referred to Public Health. Prenatal care services include weight and blood pressure monitoring, screening for anemia and Hepatitis B, nutrition education and counseling, and breastfeeding counseling. Well baby care services are provided for all infants and services include growth monitoring, developmental screening, nutrition counseling, and immunizations. The program for Children with Special Needs provides clinical assessment for children suspected of having a handicapping condition. Medical follow-up is provided by the Public Health physician and the CSHN Coordinator, who is a Public Health Nurse. The Yap CSHN Program is an interagency effort among the MCH Program, the Special Education Program, the Head start Program, and the physician and physical therapist from the hospital.

2. Select Priorities

DIRECT HEALTH CARE SERVICES - The MCH Program in the four FSM states continues to provide a large segment of the direct health care and enabling services for the maternal and infant population.

In April this year, the FSM MCH Program conducted a five-year needs assessment. The findings of that needs assessment lead to some important deficiencies, within the health care system, and to some specific health issues that the MCH Program focused its resources and activities as its priorities. The issues that were noted in the needs assessment were also augmented by recommendation from other experts to the FSM government for the need to provide coordinated and persistent array of social, medical and preventive services to improve the health of the women, mothers, infants and children who make up at least 90% of its total population.

Assessment Survey was completed during April 2005. The purpose of the Assessment was to determine the service requirements within the FSM. The study was aimed at determining;

- 1) What was essential in terms of the provision of health services,
- 2) What was available, and
- 3) What was missing.

The findings of the Needs Assessment Survey were presented during the MCH and Special Education Joint Workshop during the month of May in Kosrae State, during which time the Priorities for the next five years were selected.

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

The assessment of services for pregnant women shows that only 24.7% of the women received early prenatal care, a decline from 2002 and 2003 when 26.5% and 30.7% received early care respectively. For those women who do initiate care, only 15% receive adequate care, 9% receive intermediate care, and 76% receive inadequate care as measured by the Kotelchuk Index of Adequacy of Prenatal Care. The nutritional status of pregnant women has been a problem; however, there is no formal documentation of the problems. Informal surveys of hematocrit levels of pregnant women in Chuuk state show that approximately 50% of the women have low hemoglobin that require treatment. There is a need to improve the adequacy of prenatal care by encouraging early prenatal care and continuous prenatal care. In 2004, 8% of all those women who gave birth never received prenatal care. Of all these those who received prenatal care only 28.7% received adequate prenatal care, 39.2% received intermediate prenatal care and 30.4% received inadequate prenatal care as determined by the Kotelchuk Index.

Of the infants born in 2004, 6.7% were low birth weight, 0.5% were very low birth weight and 42 infants died for an infant mortality rate of 17.5/1000 which is a decline from the 2003 IMR of 22.6/1000, the 2001 IMR of 21.8/1000, the 2000 IMR of 17.7/1000, and the 1999 IMR of 19.5/1000. Of the infants who died in the neonatal period, the most common causes were prematurity and congenital anomalies. Of those infants who died in the post-neonatal period, acute infection was the major cause followed by complications of malnutrition. Because of the association of prenatal care and infant mortality, there is a need to improve the rates of women receiving adequate prenatal care and that the prenatal care services need to be improved and provided in a consistent manner. Of the 2,415 infants born in 2004, almost 9% were low birth weight (LBW) and 0.27% very low birth weight (VLBW) (<1500 grams). Though the VLBW may have slightly decreased from 1999 (0.8%), the overall proportion of low birth weight babies has increased and public health intervention activities need to be strengthened, not lessened.

Dental disease among children remains one of the major public health problems in all four FSM states. Recent surveys have shown that approximately 80% of young children have significant dental disease. There is a need to assure that children are screened for dental disease and appropriate referrals for restoration and treatment are made to the dental program.

Vitamin A deficiency and iron deficiency anemia are emerging health problems among children as well. Recent surveys have shown that in one state 57% of the children had Vitamin A deficient and 13% had low hemoglobin; while in another state the Vitamin deficiency rate among children was 38% and 11% had low hemoglobin. Currently two of the four states have Vitamin A supplementation programs and these data indicate the need for supplementation programs in the two additional states. Because Vitamin A deficiency and iron deficiency anemia are only indicators of other underlying nutritional deficiencies, there is a need to improve the overall nutritional status of children.

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

ENABLING SERVICES - Enabling services are those that facilitate the access to direct health care and in the FSM are usually limited to transportation, outreach, health education, and care coordination. For pregnant women in the FSM, a qualitative survey suggests that the barriers to receiving early prenatal care include the lack of transportation, lack of child-care, use of local medicine and gender of service provider. Therefore, there is a need to increase the outreach efforts to assure that women living in remote areas have access to care. This can be achieved by providing resources for transportation to prenatal clinics or for outreach teams of physicians, public health nurses, and health educators to provide these services in the field. In the FSM, where everyone knows everybody else and traditional customs are still very strong, most women do not want to be seen or examined by a male provider, worse yet, a provider who is a relative. There is a need to increase the number of female providers to assure that all women have access to care. Local medicine should be encouraged only after a woman has seen a physician.

The FSM has adopted the WHO policy of exclusive breastfeeding of infants for the first six months of life. The data shows that 99.9% of the infants are breastfed at discharge from the hospital, but at 6 months of age that percentage decreases to 35%. The two states that have the highest percentages of infants breastfeeding at six months of age also have implemented a community-9 based breastfeeding support program. The model uses older women who live in the community that are trained by the MCH staff to provide the education and support for young mothers who have been discharged home. These women are notified when a mother is discharged and make an initial home visit within 48 hours. Those mothers are provided with education and demonstrations on breastfeeding and if necessary, repeat home visits are made. There is a need to expand this model of community-based support using this traditional cultural method to all communities in the four FSM states. The 2004 data shows that 93.7% of the infants are breastfed at discharge from the hospital, but at 6 months of age that percentage decreases to 56.3%.

For children with special needs, there is a need to continue to provide home visiting and care coordination services for those children who have a severe disability and are receiving homebound services from the Department of Education's Special Education Program.

POPULATION -BASED SERVICES - These services are preventive services that are available to the entire MCH population and include disease prevention, health promotion, and statewide outreach.

With the high prevalence of dental disease among the young children in all of the four FSM states, there is a drastic need for the MCH Program to coordinate with the dentists and Dental Division staff to plan, develop and implement a comprehensive Childhood Oral Health Program in the Federated States of Micronesia. This program will include the following major

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

components: (1) Assuring a comprehensive multi-media community based awareness and education program; (2) A comprehensive preventive well baby care program with multivitamins with fluoride, educating the caretakers on good nutrition, good oral health practices; (3) A school based fluoride and toothbrush program; and (4) Improving access to restorative and treatment dental care. When completed, such plan would require (compulsory) all children between ages 3-6 years to complete their dental services before entering grade 1.

Vitamin A deficiency and iron deficiency anemia is an emerging major health problem that is becoming more evident in the maternal and child population. A survey was conducted in January and February 2,000 showed that in Kosrae 57.7% of the children and 58% of the women were deficient in Vitamin A and 13.4 % of the children and 14.4% of the women had low hemoglobin. For Yap Proper 38.1% of the children and 11.7% of the women were deficient in Vitamin A and 11.0% of the children and 18.1% of the women had low hemoglobin. These data indicate the need to improve the nutritional status of the MCH population through health education and health promotion models.

Screening services for pregnant and post-partum women include Pap smear screening, Chlamydia screening, STD screening, and Hepatitis B screening, however, there are no consistent procedures to assure that all women are provided with the full complement of screening services. There is a need to continue this collaboration among all of the programs including the MCH Program to assure that these screening services are provided consistently to the pregnant women population.

INFRASTRUCTURE BUILDING SERVICES - Activities for developing and maintaining comprehensive systems of services such as developing standards and guidelines, training, data systems, policy and procedures, quality assurance.

Under the SSDI Project, the four FSM states have developed systems of care through the development of Children with Special Needs Program and a comprehensive Well Baby Clinic Program. As part of improving the adequacy of prenatal care for pregnant women, there is a need to develop a system of care for this population by developing a common set of policy and procedures, common definitions and data collecting systems, common educational modules and materials, and training for staff to implement these changes.

Children with special needs require an interdisciplinary team of professionals, however, there is a serious lack of appropriately trained professionals to be able to provide the services that are often required by these children who have serious illnesses and require specialized care. We are in the process of recruiting a CSHCN Physician. Although the physician may not be able to provide those specialized services due to unavailability of resources, such as equipment, etc., most of the needs of this population group will be provided on a regular and timely basis. There

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

is a need to develop an alternative model of providing care to this population. The Pacific Open Learning Health Net (POLHN), an open computer system implemented by the World Health Organization (WHO), now available to the four FSM States' Public Health Services. The purpose of the POLHN is to provide an alternative method of technical assistance and on-going support to the Pacific Islands. This alternative method is based on several factors; (1) the emerging technology of advanced telecommunications; (2) the telecommunication capabilities in the Pacific Basin; and (3) the difficulty in providing technical assistance to all of the Pacific Jurisdictions because of the distances and expenses involved.

Based on the findings in the MCH needs assessment, the Health Status Indicators, and other data, the FSM's priority needs include:

1. To increase the percentage of women receiving adequate prenatal care.
2. To improve the nutritional status of women during their pregnancy.
3. To decrease infant mortality rate.
4. To increase the percentage of infants exclusively breastfeeding at 6 months of age.
5. To decrease dental disease among children.
6. To improve the nutritional status of children.
7. To decrease the percentages of acute infectious illnesses among children
8. To increase the percentage of children with special needs served by a team.

Based on the analysis and conclusions of the recent MCH needs assessment, the Health Status Indicators and the development of the MCH priority needs, the FSM MCH Program shall maintain some of the State Negotiated Performance Measures and will replace two of the current measures with three new measures.

- SP#1 - Percent of women who receive a Pap smear (Maintain)
- SP#2 - Percent of pregnant women screened for Hepatitis B (Maintain)
- SP#3 - Percent of infants exclusively breastfeeding at six months (Maintain)
- SP#4 - Percent of pregnant women who receive nutrition education (Maintain)
- SP#5 - Percent of infant caretakers who receive nutrition education (Maintain)
- SP#6 - Percent of children in Head start Programs surveyed for DMF (**Replace**)
- SP#7 - Percent children identified with developmental problems (**Replace**)
- SP#8 - Percent of pregnant women screened for low hemoglobin (Maintain)
- SP#9 - Percent infants provided fluoride at well baby clinic (Replace)

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

SP#10 - Percent of children with special needs who have a completed (re) assessment by the CSHN team within the last 12 months. (Maintain)

We are proposing to add three new State Negotiated Performance Measures based on the outcome of the Needs Assessment. We are proposing to add new SP# 6 and SP#7 and #9 as follow:

SP#6 - Percent children identified with developmental problems (New)

SP#7- Comprehensive Health Education in Schools and Communities (New)¹

SP#9 - Percent infants provided fluoride at well baby clinic (New)

These sets of priorities will be FSM's priorities for the next five years based on the result of the needs assessment carried out this year. Basically, the needs assessment was a reexamination and assessment of how and where program shortfall came about during the last program cycle in terms of service requirements within the FSM as determined in the 2000 needs assessment. This year's needs assessment also helped us to determine the service requirements within the FSM for the next program cycle in terms of 1) what is essential in terms of the provision of health services, 2) what is available and 3) what is missing. In addition, since the year 2006 will mark the beginning of the next 5-year cycle of our MCH Program, we will continue to address the regular direct medical and preventive health services through its prenatal clinic, well baby clinic, out-reach activities, and dental clinic in form of "lessons learned".

Discussion of State Performance Measures

SP#1 - Percent of women who receive a Pap smear. This measure was maintained because of its importance in assuring the overall health status of the women of child-bearing age. This activity is associated with the priority need to assure the adequacy of prenatal care. The level of service is population-based and the type of service is a risk factor.

SP#2 - Percent of pregnant women screened for Hepatitis B. This measure was maintained because of the high proportion of the population with Hepatitis B infection in the FSM. In order to prevent the transmission of the virus to the infants, a universal Hepatitis B immunization program for infants has been instituted in the FSM. The MCH Program needs to continue to monitor the infection rate among the pregnant women. The level of service is population-based and the type of service is a risk factor.

SP#3 - Percent of infants exclusively breastfeeding at six months. This measure was maintained because of the importance of exclusive breastfeeding in improving the overall nutritional status of the infant and will also prevent the severe infections that cause the high

¹ Because of space limitation on the TVIS, we were not able to add it in.

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

incidence of acute gastroenteritis and acute respiratory tract infections of these infants. It is one of the priority MCH needs and will help to decrease infant mortality. It is a direct health care service level and the type of service is a process.

SP#4 - Percent of pregnant women who receive nutrition education. This measure was maintained because of the impact that good nutrition during fetal development has on the positive outcome of the infant. A good nutritional status is also important in assuring an adequate supply of quality breast milk for the infant. This measure is one of the MCH priority needs and will assist to decrease infant mortality, increase breastfeeding, and improve the nutritional status of children. It is a direct health care level of service and the type is capacity.

SP#5 - Percent of infant caretakers who receive nutrition education. This measure was maintained because of the importance that good nutrition has not only on growth and development of the infant, but also on the nutritional status of the child and to help in decreasing the incidence and the effects of acute infectious illnesses among children. This measure is a direct health care level of service and the type of service is process.

SP#8 - Percent of pregnant women screened for low hemoglobin. This measure was added because low hemoglobin and iron deficiency anemia is an indicator of a state of nutritional risk. In a pregnant women, this risk may have a detrimental impact on the developing fetus and the newborn infant. The long term consequences of low hemoglobin in the pregnant woman may be reflected in the development of iron deficiency anemia in the infant before six months of age. This measure is directly associated with improving the nutritional status of pregnant women and may contribute in the decrease of infant mortality rates. This measure is a population based service and the type of service is risk factor.

SP#10 - Percent of children with special needs who have a completed re-evaluation by the CSHN Team within the last 12 months. This measure was added because of need to assure that children with special needs have a periodic re-evaluation by an interdisciplinary team of professionals. The special needs of these children are constantly changing depending on their response to treatment and rehabilitation. This periodic re-evaluation will assure that any developmental progress is documented and any new special needs are addressed. This measure is an enabling service and the type of service is a process.

SP#6 (proposed) - Percent children identified with developmental problems. This measure was added because of the need to assure that all infants up to 18 months of age receive developmental screening to screen for developmental delay. This activity will continue to be reinforced and encouraged to assist in the earlier identification of children who are suspected of having a handicapping condition. This measure is an enabling service and the type of service is a

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

process.

SP#7 (proposed) - Dental Health survey. This measure was added because of the high prevalence of dental disease among the young children in all of the four FSM states. There is a drastic need for the MCH Program to coordinate with the dentists and Dental Division staff to plan, develop and implement a comprehensive Childhood Oral Health Program among children attending the Head start Program in the Federated States of Micronesia. The purpose of this survey is to determine the magnitude and the severity of the dental problems in Head start children that will assist in the development of a preventive dental health education program. This measure is a population-based service and the type of service is a risk factor.

SP#9 (proposed) - Comprehensive Health Education in Schools and Communities. This measure was added because of the importance in assuring that all pregnant mothers come in early for prenatal care. This measure is associated with the priority need to assure the adequacy of prenatal care. The assessment of services for pregnant women in 2004 shows that only 24.7% of the women received early prenatal care. For those women who do initiate care, only 15% receive adequate care as measured by the Kotelchuk Index of Adequacy of Prenatal Care. The level of service is population-based and the type of service is a risk factor.

4. Select Targets

Core Performances Measures	Pyramid Level of Services				Type of Service		
	DHC	ES	PHS	IB	C	P	RF
1) The percent of State SSI beneficiaries less than 18 years old receiving rehabilitative services from the State Children with special Health Care Needs (CSHCN) Program.	X				X		
2) The degree to which the State Children with Special Health Care Needs (CSHCN) Program provides or pays for specialty and subspecialty services, including care coordination, not otherwise accessible or affordable to its clients.	X				X		
3) The percent of Children with Special Health Care Needs (CSHCN) in the State who have a “medical/health home.”		X			X		
4) Percent of newborns in the State with at least one screening for each of PKU, hypothyroidism, galactosemia. Hemoglobinopathies		X					X
5) Percent of children through age 2 who have completed immunizations for Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, and Haemophilus Influenza. Hepatitis B.			X				X
6) The birth rate (per 1,000) for teenagers aged 15 through 17 years			X				X
7) Percent of third grade children who have received protective sealants on at least one permanent molar tooth			X				X
9) Percentage of mother who breastfeed their infants at hospital discharge.			X				X
10) Percentage of newborns that have been screened for hearing impairment before hospital discharge.			X				X
11) Percent of Children with Special Health Care Needs (CSHCN) in the State CSHCN Program with a source of insurance for primary and special care.	29			X	X		
12) Percent of children without health insurance.				X	X		

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

DIRECT HEALTH CARE SERVICES - *Pregnant women and mothers:* The MCH Program in all four states provides prenatal care services for pregnant women, post-partum care and family planning services for women, and well baby care services for infants. In assessing the National Performance Indicator for women who receive care in the first trimester, 24.7% of the women received early care in 2004, which is much less than the targeted objective of 23%. The three-year running averages from 2000 to 2004 shows an increasing trend from 21.5% in the 1999-01 period to 29.1% in the 2000-02 period, 31.7% in the 2001-03, and then a slide decrease to 29.3% in the 2002-04 period. However, this is still low and the trend is still remaining with no significant increase at least for the past four years. The increase in early prenatal care is a reflection of the efforts of the MCH programs in defining this issue as

Percent of Women with Early Prenatal Care						
States	1999	2000	2001	2002	2003	2004
Chuuk	6.9	22.3	11.6	9.1	22.2	18
Kosrae	27.5	35.1	34.8	37	31	41
Pohnpei	6.1	19.9	58.1	57.4	42	18
Yap	21.2	22.9	18.8	26	28	22
FSM	9.7	22.7	32.1	32.4	30.8	24.7
3 Years Average FSM			21.5	29.1	31.7	29.3

a priority and providing health education to women and conducting outreach services in the communities. National Performance Measure #6, which measures teen pregnancies show that 26.5 /1000 teen females had a pregnancy which exceeded the targeted objective of 22/1000 teens. In assessing the three-year running averages, there appears to be a slight declining trend in teen births in that the three year average for 1999-01 was 28.3/1000 LB to teen mother, with a slight decrease to 26.6/1000 in 2000-02, and 2001-03 respectively, and slightly up with 27.1 in 2002-04 period. By individual states, a Pohnpei State teen birth is significantly higher with 50/1000. See table below.

Birth Rate (per 1000) Teen-age Mothers Aged 15-17 years old						
States	1999	2000	2001	2002	2003	2004
Chuuk	19.9	16.9	15	14.4	18	22
Kosrae	6.8	10.2	14.9	23	23	19
Pohnpei	52.3	41.8	53.8	48	41	50
Yap	28.2	37.9	17.2	27	25	15
FSM	32.9	26.7	25.2	28.1	26.7	26.5
3 Years Average FSM			28.3	26.6	26.6	27.1

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

The MCH programs report that there have been an increase in the number of educational sessions on the prevention of teenage pregnancies to youth groups in the community and an increase in outreach to provide health care and preventive education to students in the community colleges.

Prenatal care services include assessing women for high risk status to determine the level of services that is appropriate for them. All women are screened for cervical cancer with a Pap smear, anemia, STD, Hepatitis B, and risk for gestational diabetes. For the Year 2004, a total of 2893 pregnant women received prenatal care services of which 27.3% received Pap smear screening, 72.4.7% were screened for Hepatitis B, and 89.6% were screened for anemia. At each clinic visit, weight and blood pressure monitoring is provided. Nutrition education services are provided at both the prenatal clinics and well baby care clinics. During the Year 2004, of the total 2244 women in the states of Chuuk, Pohnpei, Kosrae, and Yap who received prenatal care services all 100% are reported to have at least one nutritional counseling and education session.

Infants and children: The MCH Program in all four states provides newborn and well baby care services, immunization services, school health services, and some preventive dental services. Depending on the state, newborn services are initiated between two weeks and one month of age and is the first well baby care visit for the infant. During the previous years, the Well Baby Program was re-designed to include an emphasis on anticipatory guidance and preventive education. Policy and procedures were established and training of the MCH staff was provided on the implementation of the procedures. The components of the clinic includes: Parent interview, growth measurements, immunizations, developmental screening, hematocrit screening, education and counseling, and physical examination. With the stabilization of the MCH Coordinator and staff at the state levels during the Year 2001, some progress has been made in implementing the policy and procedures for the comprehensive well baby care program.

In assessing the status of completed immunizations among the 2 year old children, in the Year 2004, 83.1% were reported to have been fully immunized which is above the targeted objective of 73%. In assessing the three-year running averages, for the period from 2000-2004, 58.4% of the children were fully immunized in 1997-1999, with an increase to 62.3% 1998-00, 71.9% in 1999-01, 73.5% in 2000-02, 77% in 2001-03, and 80.8% in 2002-2004.

Percent of Children through 2 years of age who have completed immunization.						
States	1999	2000	2001	2002	2003	2004
Chuuk	70	54.2	56	54.6	61	80
Kosrae	80	92.2	94	95	96	98
Pohnpei	55	48	62.3	77	77	75.1
Yap	91	86.6	75.3	88	87	79

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

FSM	74	70	71.8	78.9	80.3	83.1
3 Years Average FSM			71.9	73.6	77	80.8

Efforts have been continue to improve immunization coverage. Well baby clinic services were provided in the four states and of the caretakers who attended well baby clinic 100% of them were provided with at least one nutritional counseling session. The other direct health care State Negotiated measure was for the monitoring of the 6 month old infants who were exclusively breastfed. The importance of this measure is because of the W.H.O. Baby Friendly Hospital Initiative, which recommends exclusive breastfeeding of infants at discharge and for the first six months of life. Under this initiative, exclusive breastfeeding is defined as breast milk only with no water, no coconut juice or water, no juice, no solid foods for the first six month. Since 1997, the percent of infants who are exclusively breastfeeding have fluctuated from 30% in 1997 to 48% in 1998, 35.6% in 1999, 35.9% in 2000, and 57.2% in 2001, 57.6% and 2002, 51.4% in 2003 and 56 in the Year 2004.

Percent of Infants who are Exclusively breastfed at 6 months of age.						
States	1999	2000	2001	2002	2003	2004
Chuuk	64.5	62	78	71	80	69
Kosrae	55	63.9	66	68	64	60
Pohnpei	13.3	NR	50.5	65	47.7	48.3
Yap	9.8	17.8	34.5	26.7	14	47
FSM	35.6	35.9	57.2	57.6	51.4	56
3 Years Average FSM	37.9	47.1	42.9	50.2	55.4	55

Despite these fluctuations, there has been a definite trend of an increasing proportion of infants who are being exclusively breastfed in the FSM. In assessing the three year running averages, 37.9% of 6 month old infants were breastfed for the period 1997-99, with an increase to 47.1% in 1998-00 and 42.9% in the 1999-01, 50.2% in the 2000-02, 55.4% in the 2001-03 and 55% in the 2002-04 period.

Children with special health care needs: The MCH Program in all four states has developed a Children with Special Needs Program and continues to provide a special clinic and follow-up services for children with special needs. This program is a collaborative interagency effort among the MCH Program, the Special Education Program, the Head start Program, the state hospital, and community nutrition programs. The professional staff that are included as part of the interagency team include the CSHN Coordinator (Public Health Nurse), a physician from the hospital, the physical therapist (where one is available), Related Services Assistants (RSA)

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

from the Special Education Program, and the Disabilities Coordinator from the Head start Program. Children who are suspected of having a handicapping condition are referred to the CSHN Assessment Clinic where a comprehensive assessment is provided, intervention services are recommended and follow up services are provided by the CSHN Coordinator or the RSA. Referrals for specialty clinics and specialty services are made through the CSHN clinic. As of 2004, there are a total of 704 children registered in the four state CSHN Programs.

The following National Core Performance Measures (#1 - #2) and State Negotiated Performance Measures (SP#3, SP#4, SP#5) are related to the Direct Health Care Services level of the MCH Pyramid.

National Core Performance Measure #1 - Not applicable for the FSM

National Core Performance Measure #2 - The degree to which the State Children with Special Health Care Needs (CSHCN) Program provides or pays for specialty and subspecialty services, including care coordination, not otherwise accessible or affordable to its clients. *Annual Performance Objective for 2001 = 5.*

The Annual Performance Indicator for FSM for 2001 is 5, which is the same as the indicator for 2000. Of the nine possible specialty and sub-specialty services provided by the CSHCN programs, all states provide medical and limited surgical sub-specialty services by referral, PT services home, health care services, nutrition services, care coordination and early intervention. Because of the limited resources, there does not appear to be any opportunities of increasing the array of specialty and subspecialty services for children with special needs.

State Negotiated Performance Measure SP#3 - Percent of infants who are exclusively breastfed at 6 months of age. *Annual Performance Objective for 2004= 68*

The Annual Performance Indicator for FSM for 2004 is 56.0%, which did not reach the Annual Performance Objective of 68% expected performance for the year. In assessing the data for the individual states for 2004, Chuuk state had the highest proportion of infant who were exclusively breastfed at 70.1% , followed by Kosrae with 56.6%, and Pohnpei state with 48.4% and Yap state with 47%. In assessing the trends from 1999-2004, all four states individually have shown progressive increases in the proportion of 6 month old infants being exclusively breastfed. One of the major reasons that Chuuk and Kosrae have a significantly higher rate is because of the fact that these two states have implemented a community-based program where older women are trained to provide the education and support to the younger mothers who are discharged home from the hospital. The importance of assuring

Percent of Infants who are Exclusively breastfed at 6 months of

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

age.						
States	1999	2000	2001	2002	2003	2004
Chuuk	64.5	62	78	71	80	69
Kosrae	55	63.9	66	68	64	60
Pohnpei	13.3	NR	50.5	65	47.7	48.3
Yap	9.8	17.8	34.5	26.7	14	47
FSM	35.6	35.9	57.2	57.6	51.4	56
3 Years Average FSM			42.9	50.2	55.4	55

breastfeeding is because the causes of infant mortality and morbidity in the FSM are largely due to diarrheal diseases and may be attributed to bottle feeding and early weaning and introduction of other foods besides breast milk. In order to reduce infant mortality in the FSM, the promotion of exclusive breastfeeding has become a nation-wide initiative as a joint collaborative effort between the Federated States of Micronesia and UNICEF and WHO in the “*Baby Friendly Hospital Initiative*” (BFHI) project. Because of the successful achievements of the MCH Program, the targeted objective for 2002 will be maintained at 66% for 2002 with progressive increases up 70% by the Year 2005.

State Negotiated Performance Measure SP#4 - Percent of pregnant women who receive at least one nutrition education and counseling session (defined as covering the following topics: diet recall, importance of three meals, balanced diets, exercise) as early as possible during their pregnancy. *Annual Performance Objective for 2004= 98*

Percent of pregnant mothers who received at least one nutrition counseling session						
States	1999	2000	2001	2002	2003	2004
Chuuk	100	100	1000	100	100	100
Kosrae	NR	NR	72	86	78	91
Pohnpei	100	100	100	100	100	100

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

Yap	100	100	100	100	100	100
FSM	100	100	93	96.5	94.5	97.5
3 Years Average FSM			97.6	96.5	94.7	96.2

The Annual Performance Indicator for FSM for 2004 is 97.8% which has met the targeted objective for the year. During 2004 the four states reported that of the 2,244 women who received prenatal care, 2,227 received nutrition education and counseling services. These services are usually provided during the first visit at the clinic no matter what month of pregnancy the women receives care. Nutritional problems among pregnant women continues to be a problem as evidenced by the increasing number of pregnant women with anemia. Nutritional education will remain a high priority for the MCH Program and will continue to be provided in all prenatal care clinics.

State Negotiated Performance Measure SP#5 - Percent of caretakers of infants who receive education and counseling related to feeding and nutrition of infants. *Annual Performance Objective for 2004= 98%*

The Annual Performance Indicator for FSM for 2004 is 100%, which has met the targeted objective for the year. During 2004 of the 2,921 caretakers who attended well baby clinics 2,921 are reported to have received education and counseling related to feeding and nutrition of infants. Nutrition problems are still prevalent among many infants and children in the Federated States of Micronesia. Children continue to be admitted to the hospital with dehydration and malnutrition; children continue to be identified with the complications of Vitamin A deficiency; and

Percent of caretakers of infant who received at least one nutrition ed. & counseling.						
States	1999	2000	2001	2002	2003	2004
Chuuk	100	100	100	100	100	100
Kosrae	NR	NR	49	70	99	99
Pohnpei	100	100	100	100	100	100
Yap	100	100	100	44	100	68
FSM	100	100	87.3	78.5	99.7	91.7
3 Years Average FSM			95.7	88.6	88.5	89.9

children continue to fail to thrive. In order to make an impact on these preventable nutritional problems, nutrition education will continue to be a major component of the well baby care services. Nutrition education has been designated as an important component of the well baby care services in the MCH Program for the FSM and all of the nurses and staff in the MCH

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

Program should provide this service. At this time, it is very important to re-assess the MCH nutrition education and counseling programs at both the central clinics and also at the outlying communities because the data (average of 90% counseling done to the caretakers and mothers) is not correlate with outcomes (anemia, teen pregnancy, VLBW, LBW, IMR, etc.).

ENABLING SERVICES - *Pregnant women and mothers:* As part of the prenatal care services, health education services are provided to all women who attend the prenatal care program. These health education sessions include nutrition, diet, healthy pregnancies. For pregnant women who live in the remote outlying areas that are not accessible to the public health and hospital based services, outreach services are provided by the Health Assistants in the dispensaries. In Yap state, Chuuk state, and Pohnpei state, health teams are deployed on ships to travel to the outer islands where prenatal care is provided to pregnant women living on these remote islands. Those women who are identified as high risk are brought to the main island where they continue their prenatal care at the Public Health prenatal care clinic or at the State Hospital. For women who have delivered and who attend the post-partum clinic, family planning education and counseling are provided with referrals to the Family Planning Clinic for those women who choose a contraceptive method.

Infants and children: In Chuuk, Pohnpei, and Yap states, the MCH Program provides outreach services in remote rural villages to provide immunization, dental services and weight monitoring services. The MCH Program provides transportation by ship or by vehicle for a public health team of professionals to travel into communities to provide immunization, screening services and health education services.

Children with special health care needs: As part of the Children with Special Needs program, transportation services to the CSHN Assessment clinics were provided by the Special Education program. For those children who lived in the rural areas and did not have transportation or have difficulty in being transported to the clinic site, home visits by the SSDI Consultant, the interagency team of CSHN Coordinator, and the Special Education staff of Related Services Assistants were provided where an assessment was conducted and recommendations were made to the parents. Case management and follow up services were provided to all children who are in the CSHN program.

The following National Core Performance Measure (#3) and the State Negotiated Performance Measure (#10) are related to the Enabling Services level of the MCH Pyramid.

National Core Performance Measure #3 - The percent of Children with Special Health Care Needs (CSHCN) in the State who have a “medical/health home.” *Annual Performance Objective for 2004=70%*

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

The Annual Performance Indicator for FSM was 100% in the past years, 2004 is also 100%, based on the FSM understanding on the definition of medical home at the time. Because of the unique situation in all four FSM states, all medical and health care services are provided by or paid for by each State Hospital and the programs in the Primary Health Care Services Division. When a child is referred and accepted in the CSHN Program, the CSHN Physician becomes the primary physician. In addition, because of the close working relationship between the CSHN Program and the MCH Program, all preventive health care services provided to well babies and children are also provided to all children with special needs. The CSHN Coordinator becomes the primary coordinator for each of the children in the program and coordinates all of the medical and health services. Therefore, we assumed that every child in the CSHN Program has a medical/health home. However, at the 3rd FSM Early Childhood Special Education and Maternal and Child Health, a joint Workshops May 18, 2004, there was a presentation on the “Medical Home” concept where we realized that “medical home” is more than just the hospitals, primary health clinics and other health and medical related agencies. Therefore, the MCH and CSHN staffs felt and realized that 70% may be more realistic than the 100%.

State Negotiated Performance Measure SP#10 - Percent of children with special health needs who have a completed re-evaluation by the CSHN Team within the last 12 months. *Annual Performance Objective for 2004=65%*

Percent of CSN who have completed re-evaluation by CSN team within last 12 months						
States	1999	2000	2001	2002	2003	2004
Chuuk	NEW	84.4	91.1	83	76	61.3
Kosrae	NEW	0	9	93	100	100
Pohnpei	NEW	17	32.3	37	29.8	42.1
Yap	NEW	16.8	18.8	4.9	12	11.3
FSM	NEW	29.5	37.8	54.7	54.4	53.7
3 Years Average FSM				40.6	48.9	54.2

The Annual Performance Indicator for FSM for 2004 is 53.7%, which is lower than the target objective of 65% . For the past three years of 2002-2004, shown above an increase based on the 3 Years Average; 2000-02 with 40.6%, increased to 48.9% for 2001-03, and further increased for the 2002-2004. Of the 704 children registered in the CSHN data base for the four states, 519 were identified as having received a re-evaluation within the last 12 months. Because of the high level of performance for the past three years, the performance objective for the years to come, 2005 and 2006 will need to increase to meet the target objective.

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

POPULATION-BASED SERVICES - *Pregnant women and mothers:* The population-based services for pregnant women are provided through the prenatal care clinic. These services include screening for anemia, screening for Hepatitis B surface antigen, STD screening, nutrition education and counseling, breastfeeding education and counseling. During the Year 2004, there were 2,244 women who received prenatal care services in the four states and of these, 24.7% received care in the first trimester. During prenatal care program, women receive a Pap smear screen and are screened for anemia and Hepatitis B. During the Year 2004, 80.1% of the women received a Pap smear of which 5.4 % were positive. This compares with 56.6% of the women who received a Pap smear in 2003 and 5.6% were positive.

Percent of pregnant women in PNC with low Hemoglobin (diagnosed with anemia):						
States	1999	2000	2001	2002	2003	2004
Chuuk	NEW	8.4	17.5	7.4	98	73.4
Kosrae	NEW	19	25	18	11	10
Pohnpei	NEW	35.8	34.8	53	43	32.4
Yap	NEW	14.2	42	50	56	23
FSM	NEW	19.3	29.8	32	52	34.7
3 Years Average FSM				27	37.9	39.6

The variability in the proportion of women receiving Pap smears is due to the fact that the supply of Pap packs is not consistent and some of the states are without Pap smear kits for several months during the year. This problem is being addressed at the National Government level by developing an account with the Fisher Scientific Company and a one year supply of Pap smear kits will be purchased and distributed to the four states. During 2004, of the pregnant women in the prenatal clinics, 80% of the women were screened for Hepatitis B which is an increase over the 47.8% for 2002 and 56.6% for 2003. For the Year 2004, overall 93.9% of the women in the four state prenatal clinics were screened for anemia which is a slight decline from 98.7% of the women in the year 2003.

Infants and children: The MCH Programs in the four states provide services through the well baby care clinics. Population-based services for infants included developmental screening, growth monitoring, immunization, and providing fluoride supplements. For older children, services include dental sealants on at least one molar tooth. The percent of third grade children who have received at least one protective dental sealants has been fluctuating from 55.5% in 2000, 43% in 2001, 82% in 2002, 77.3% in 2003 and then down to 58% in 2004. The rates for completed immunization of 2-year old children had been steadily increasing from 70% in 2000, 71.8% in 2001, 78.9% in 2002, 80.3% in 2003 and 83.1% in 2004. One of the problems with the provision of dental care is that the MCH Program is dependant on the Dental Divisions for

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

personnel to provide the services; often the objectives of the programs are not consistent and the objectives of the MCH Program are not a priority and personnel are not available to provide the preventive services.

Children with special health care needs: Since services for children with special needs are individualized, specific targeted population-based services were not provided to these children. Because of the close association between the CSHN Program and the MCH Program in the four FSM states, these children were included in the population-based services provided to all children through the MCH Program's well baby care services.

The following National Core Performance Measures (#4, #5, #6, #7, #8, #9, and #10) and State Negotiated Performance Measures (SP#1, #2, #8, and #9) are related to the Population-Based Services level in the pyramid.

National Core Performance Measure #4 - Not applicable for the FSM.

National Core Performance Measure #5 - Percent of children through age 2 who have completed immunizations for Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza, Hepatitis B. *Annual Performance Objective for 2004=80*

The Annual Performance Indicator for FSM for 2004 is 83.1%, which is steadily increased from 71.8% in 2001, 78.9% in 2002, and 80.3% in 2003.

In assessing the data for three-year running averages, the proportion of fully immunized children was 58% in 1998-00, and steadily increases to 62% in 1999-01, 74% 200-02, 80% in 2001-03, and 81% in 2002-04. When the data for

Percent of Children through 2 years of age who have completed immunization.						
States	1999	2000	2001	2002	2003	2004
Chuuk	70	54.2	56	54.6	61	80
Kosrae	80	92.2	94	95	96	98
Pohnpei	55	48	62.3	77	77	75.1

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

Yap	91	86.6	75.3	88	87	79
FSM	74	70	71.8	78.9	80.3	83.1
3 Years Average FSM			71.9	73.6	77	80.8

the four states are assessed separately, in the past two of the four states always meet the targeted Objective; (Kosrae State; 91% in 2002, 96% in 2003 and 98% in 2004; Yap State; 89% in 2002, 87% in 2003, and 79% in 2004) were higher than the targeted objective. The declined in Yap immunization rate in 2003 and 2004 was due to several events affecting the Yap State; 1) broken down of the Ms. Micro- Spirit (old field trip ship to go out to the outer islands, (2) the typhoon Sudal, and the (3) the outbreaks of Dengue in Yap. Chuuk State usually immunize a little over half of the 2 year old population, however, with the special supports (resources) from CDC, with on the Mass Measles Campaign, this type of efforts put up the Chuuk State to meet the target objective of 80%. While efforts was mainly for the measles, others were also updated, located and followed up. Pohnpei state has shown an increase to 75% from the lowest percentage recorded in all states at 48% in the year 2000, 62.3% in 2001, 77% in 2002 and 2003 and 75.1% in 2004. Possible reasons for the lower percentage in Pohnpei was from lack of proper planning and disorganization. In 1998-2000, the idea of decentralization of services was carry out without proper planning. The policy decision was reversed in 2001-02, the services is being centralized at the central PH Clinics again. Due to consequences of management problems over the years, in 2004-5, 10 staffs (1 doctor and nurses) of PH resigned, not MCH staffs but affecting MCH program activities as they are also to cover up for others in the same Division. A cursory review of immunization cards of some children have shown that there is a discrepancy between the documentation of immunizations given on the immunization cards and the central immunization data base. This lack of documentation also adds to the problem in Pohnpei. Since that time, Pohnpei state has made many changes in the immunization program and services are once again being provided at the community level in immunization clinics which has led to the increase seen in 2001. The low rates in Chuuk state are due largely to the fact that the population is widely distributed throughout the Lagoon Islands and the outer islands, which makes access to health care difficult. Outreach services to remote islands have been limited because of the limitation in resources for transportation. Yap state has curtailed the public health outreach activities to the outer islands, which accounts the decline in the percentage of children fully immunized. The success of Kosrae state is because immunization of children is one of the major efforts of the MCH Program where immunizations are not only given during well baby clinics, but outreach services for immunizations to the communities are provided routinely.

National Core Performance Measure #6 - The birth rate (per 1,000) for teenagers aged 15 through 17 years. *Annual Performance Objective for 2004=18*

Birth Rate (per 1000) Teen-agers Mothers Aged 15-17

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

States	1999	2000	2001	2002	2003	2004
Chuuk	19.9	16.9	15	14.4	18	22
Kosrae	6.8	10.2	14.9	23	23	19
Pohnpei	52.3	41.8	53.8	48	41	50
Yap	28.2	37.9	17.2	27	25	15
FSM	32.9	26.7	25.2	28.1	26.7	26.5
3 Years Average FSM			28.3	26.6	26.6	27.1

The Annual Performance Indicator for FSM overall for 2004 is 26.6 /1000 females 15-17 years, which is higher than the targeted objective for the year of 18/1000 teens. In assessing the three year running averages for 2000-2004, there is a slight declining trend in the time period 1999-2001, the rate was 29.8/1000 for 1997-99 and decreases to 26/1000 for 1999-01, and then remain steadily 26.6/1000 for 2000-02, 26.7/1000 for 2001-03, and 27.1/1000 for 2002-04. Examination of the year 2004 data for the four states reveal that Pohnpei state recorded the highest rate at 50/1000, followed by Chuuk at 22/1000, and Kosrae 19/1000. One of the reasons for these high rates may be because of the cultural factors where many of the young women in Micronesia at 17 years of age are married and starting their families. Another reason may be because of the stigma of having a child at a young age is not as prevalent as in the mainland US. In Micronesia, where living in extended families is the cultural norm, when infants are born to young mothers, the maternal grandparents and other relatives assist the young mother in raising the child. Despite, these cultural values, it is still common for young women with infants to drop out of school and for this reason, the prevention of teen births will need to continue to be a focus of the MCH Program.

National Core Performance Measure #7 - Percent of third grade children who have received protective sealants on at least one permanent molar tooth. *Annual Performance Objective for 2004=35%*

Percent of children who have received protective sealants						
States	1999	2000	2001	2002	2003	2004
Chuuk	18	27.1	12	NR	NR	33
Kosrae	0	38.9	0	53	80	58
Pohnpei	53	99.7	100	97	88	98
Yap	0	50.3	22.4	96	64	43
FSM	27.4	55.5	42.7	82	77.3	58
3 Years Average FSM			41.8	60.1	67.3	72.4

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

The Annual Performance Indicator for FSM for 2004 58% which is above the targeted objective for the year. The MCH Programs in the four states have been working in collaboration with the state Dental Services Division for the past several years to achieve this performance measure. In 2004, 58% received dental sealant, an increased from 44.4% in 2002 and 54% in 2003. The 3 Year average shown steadily increase from 32.7% for 1998-00, 41.9% for 1999-01, 47.5% for 2000-2, and 52.1% for 2002-04. In assessing the 2004 data for each state, there is tremendous variability in that Chuuk reported 33% of the third grader children received a dental sealant, 43% in Yap, 58% in Kosrae, and 98% in Pohnpei. The MCH Program has purchased dental sealants and provided them to the dental staff who applied the sealants. In addition, the MCH Program also purchased some portable dental equipment so that dental personnel were able to go into the schools to provide these services. The MCH Program is dependant on the dental staff to provide the services and often the staff is not available. The MCH Coordinators have reported that few school visits were conducted during 2001 because of the lack of time for the dental staff.

National Core Performance Measure #8 - The rate of deaths to children aged 1-14 caused by motor vehicle crashes per 100,000 children. *Annual Performance Objective for 2004=6.5/100000 children age 14 and younger.*

Death rates unintentional injuries among children 1-14 ages to MV crashes (per 100,000):						
States	1999	2000	2001	2002	2003	2004
Chuuk	0	4.1(1)	4.5(1)	0	9.11(2)	9.1(2)
Kosrae		0	0	0	0	32.7(1)
Pohnpei	0	6.9(1)	0	0	7.1(1)	0
Yap		0	0	0	0	0
FSM		4.6	2.3	0	6.9	6.9
3 Years Average FSM				2.2	3	4.6

The Annual Performance Indicator for FSM for 2004 is 6.9/100,000 children 1-14 years of age which is slightly higher than the targeted objective for the year. In 2004, there were a total of three reported deaths (two in Chuuk and one in Kosrae) to children between 1-14 years of age because of motor vehicle accidents. The 3 Years Average; indicating some increasing from 2.2/100,000 in 2000-02 period, 3/100,000 in the 2001-03 period and 4.6/100,000 in the 2002-2004 period. However, because of the small numbers of events, care must be taken in interpreting the data. There are very few deaths in all age groups due to motor vehicle accidents primarily because of the fact that speeding cars are rare because of the bad conditions of many of

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

the roads in the FSM states. Those areas that are paved and have heavy traffic patterns are generally not in the villages where most of the population are residing and where the children are playing.

National Core Performance Measure #9 - Percentage of mothers who breastfeed their infants at hospital discharge. *Annual Performance Objective for 2004=99*

Percent of mothers who breastfed their infants at hospital discharge.						
States	1999	2000	2001	2002	2003	2004
Chuuk	100	100	100	100	100	100
Kosrae	100	99	100	99	99	99
Pohnpei	100	100	100	100	100	100
Yap	100	100	92.9	74	37	76
FSM	100	100	99.3	93.2	84	93.7
3 Years Average FSM			99.7	97.5	99.2	90.3

The Annual Performance Indicator for FSM for 2004 is 93.7% which is below the targeted objective for the year. Three of the four hospitals in the FSM (Chuuk, Pohnpei, and Kosrae) adopted the Baby Friendly Hospital concepts and put forward the policy, and Yap just started. This consistently high percentage of mothers who are discharged from the hospital while breastfeeding is due to the fact that bottle formula are not allowed in any of the hospitals in the FSM unless ordered by the physician for medical reasons; all mothers are encouraged and supported to breastfeed their infants while in the hospital; and mothers are not discharged from the hospital until the infant is breastfeeding with no difficulties.

National Core Performance Measure #10 - Not applicable for FSM

State Negotiated Performance Measure SP#1 - The percent of women receiving services in the MCH Programs who receive a Pap smear. *Annual Performance Objective for 2004= 40%*

The Annual Performance Indicator for FSM for 2004 is 34.4% is still

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

lower than the targeted objective for the year. The primary reason given for the fewer number of women receiving a Pap smear than anticipated was the lack of consistent availability of Pap smear kits in those states with lower proportions of screened women and the disruption in prenatal care services because of the de-centralization of services from the central public health facility into the community dispensaries. It is also from various requirements of the airline from packaging, for someone to be certified and after we met that one, the “certified shippers” and payment upfront. All these are the consequences of the Sept 11. The Airline does not allow cash payment but accept “credit cards”. Payment of freight charges takes a long time to go through that process. However, this issue is being handled by the Pacific Island Heath Officers Association (PIHOA) and PPHSN. The National MCH Program is addressing this problem in the year 2004 by obtaining estimates of the number of Pap kits needed in each state and purchasing a year supply of Pap smear kits that will be distributed to the four states.

During the Year 2004, a total of 2,893 women received services in the MCH Programs (prenatal, post-partum, and family planning) of which 790 (27.3%) received a Pap smear. In assessing the data from the four states for the Year 2004, the State of Chuuk provided Pap smear screening for 10% (100 of the 954 women) of the women; in Kosrae, 521 of 647 (80.5%) women were screened with a Pap smear; in Pohnpei 20 out of 968 women (2.1%) and in Yap 149 out of 324 (46%) of the women received Pap smears. More important is assessing the proportion of the screened women with positive Pap smear screening results. In the year 2004, 2% of the 100 women in Chuuk and 19% of the 149 women screen in Yap had positive screen;

	FSM	Chuuk	Kosrae	Pohnpei	Yap
Percent Positive Pap Smear					
2003	1.3	1.2	0	0	4
2004	5.3	2	0.4	0	19
Percent Positive Hepatitis B					
2003	5.6	8.3	2.0	3.1	9.0
2004	5.4	6.0	1.7	2.7	11
Percent Low Hemoglobin					
2003	52	98	11	43	56
2004	34.7	73.4	10	32.8	23

whereas in Kosrae and 0% of the women in Pohnpei were screened positive. Women with positive Pap smears are referred to the medical staff at the state hospital for intervention and treatment.

State Negotiated Performance
Measure SP#2 - Percent of pregnant women who have been screened for Hepatitis B surface antigen. *Annual Performance Objective for 2004= 68%*

The Annual Performance Indicator for FSM for 2004 is 80.1%, which is higher

than the targeted performance objective for 2004. This represents a large increase over the 56.6% of the women in 2003, the 47.8% in 2002. The percentage of women screened varied among the four states: this year, Chuuk screened only 43% of the pregnant women who attended the MCH clinics, which is significant dropped from 92.6% in 2003. Kosrae and Pohnpei States had the highest percentage with 100% in 2000 and 2001, dropped down to 0% in 2002 and 2003

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

(Kosrae) and now increase to 80%. Pohnpei was also dropped to 63% in 2002 and 51% in 2003. Yap maintain to be over the target objective, although, there was also a slight decrease in 2002 with 83% Yap maintained above average and over the target objective. The possible reasons for these fluctuations have been economic and changing and relocation of manpower and offices. The bottom line is disorganization of which is now being discussed and shared with stakeholders and the appropriate leaderships for supports which have been positives and confidence for the year to come.

In examining the 2001 data for positive Hepatitis B status, Yap state reported the highest number of women with positive Hepatitis B screening with 10.9% of the women screened being positive; followed by Chuuk with 8.3% positive, Pohnpei with 3.8% positive, and Kosrae with 2.0% of the women screening with a positive test.

State Performance Measure SP#8 - Percent pregnant women attending prenatal care who are screened for low hemoglobin. *Annual Performance Objective for 2004= 96%*

The Annual Performance Indicator for FSM for 2004 is 93.9% which is slightly lower than the targeted objective for the year. It reflects the fact that hemoglobin screening is routinely performed at the first prenatal care visit no matter when that first visit occurs. In assessing the percent of women screened by the states for 2004, Kosrae, Pohnpei and Yap states are all screening 100% of the women who attend prenatal care services; whereas Chuuk state screens 75% of the women in the prenatal clinic. The performance measure is largely dependent on the availability of the laboratory supplies to measure the hematocrit or hemoglobin and is the reason for Chuuk's lower performance measure. The most

disconcerting aspect of the data is that the proportion of pregnant women in the FSM who attend the prenatal clinic with low hemoglobin has increased from 32% in 2002 to 34.7 in 2004. Of the pregnant women who were screened in 2004, the pregnant women in Chuuk have the highest proportion with anemia in that 73.4% of the women screened have low hemoglobin that required iron therapy, followed by Pohnpei which has 32.4% of the women with anemia, Yap state with 23% and Kosrae with 10% of the women reported to have low hemoglobin results. These data becomes even more concerning when viewed in the

	FSM	Chuuk	Kosrae	Pohnpei	Yap
Percent Positive Pap Smear					
2003	1.3	1.2	0	0	4
2004	5.3	2	0.4	0	19
Percent Positive Hepatitis B					
2003	5.6	8.3	2.0	3.1	9.0
2004	5.4	6.0	1.7	2.7	11
Percent Low Hemoglobin					
2003	52	98	11	43	56
2004	34.7	73.4	10	32.8	23

light of the fact that there is an increasing prevalence of Vitamin A Deficiency among young children, increasing anemia rates among young children, and lead poisoning among children. It

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

appears as if the health status of the most vulnerable of the population - mothers and children - is being compromised because of a pervasive and overwhelming status of poor nutrition. The MCH Program must develop and implement an aggressive nutrition education and food supplement program to assure that the nutrition of the mothers, infants, and children in the FSM is improved.

State Performance Measure SP#9 - Percent infants who received at least six bottles of fluoride supplement in the first year of life. *Annual Performance Objective for 2004= 20%*

The Annual Performance objective for FSM for 2004 is 7.5% in average. It is below the target objective. Most of the FSM States have difficulties with supplies and in coordinating with Dental clinics on proper recording and reporting on this performance objective. Pohnpei and Kosrae did not collect the data and not reporting for this year report and 2003. The collecting of data continues to be a problem in all of the four states coupled with the fact that some of the states were depleted of their supply of fluoride supplement during the year.

During the 2005 MCH Need Assessment Survey, a list of MCH Needs ranked and the problem of Dental Caries was ranked the 3rd priority for FSM. The evidence of the dental caries was cleared and with strong recommendation by the stakeholders. Therefore, prior years obstacles need to be resolved with the supports of the stakeholders and or the women NGOs, for example: the question and issue on the inconsistency and in-compliance of actually taking the supplement, the lack of education on overall oral hygiene, the effectiveness of this activity and the impact of the program in preventing dental caries at the community levels. The MCH Program will continue collaborate and partner with Dental Health programs to develop a more basic and comprehensive oral hygiene education program with the application of fluoride varnish starting in the Well Baby Clinics and extending to the Well Child Clinics and the schools. Policy direction to review dental reports and to be providing to the MCH program by month or quarterly to measure the dental caries program activities and share data with appropriate leaderships.

INFRASTRUCTURE-BUILDING SERVICES - *Pregnant women and mothers:* The prenatal and post-partum care services are planned, implemented, and evaluated by the Family Planning Coordinators who are funded through the Title X Family Planning Program or the state government. These coordinators work with the MCH Coordinators; however the infrastructure-building services are accomplished by the Family Planning Coordinators. During 2002, the four states developed a policy and procedure manual for prenatal care which is an attempt to standardize the care of pregnant women across the FSM. Training on the implementation of these procedures have been conducted during the on-site consultations and the procedures are being implemented.

Infants and children: In order to assure a consistent standard of care for well baby care,

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

the MCH Programs in the four states developed the comprehensive well baby care program through the efforts of the SSDI Project. The policy and procedure manual was completed and training provided on the implementation of the procedures. In-service training was provided on growth monitoring and developmental screening. The MCH staff in each of the states will decide on the methods of phasing in the well baby care program. However, because of the changes in the MCH Coordinators in three of the states, the implementation of the comprehensive well baby clinic services was delayed and the new MCH Coordinators were re-trained.

Children with special health care needs: During 2004, the CSHN Program continued to develop the CSHN Program and the CSHN Interagency Assessment Clinic through the efforts of the SSDI Project. In 2001, training was provided to the CSHN Coordinators on the Policy and Procedures Manual, the forms, the data system, and the implementation of the procedures. The data base structure was developed using EPI-INFO and training was provided on data entry and data extraction and analysis. As of the Year 2004, in the four states, there were a total of 704 children in the CSHN computer data base; of which 519 (54.0%) were reported as having a re-evaluation during the year.

The following National Core Performance Measures (#11, #12, #13, #14, #15, #16, #17, and #18) are related to the Infrastructure Building Services level in the pyramid.

National Core Performance Measure #11 - Percent of Children with Special Health Care Needs (CSHCN) in the state CSHCN Program with a source of insurance for primary and specialty care. *Annual Performance Objective for 2004=65%*

The Annual Performance Indicator for FSM for 2004 is 53.7% 2001. The FSM is unique in that the State Government provided all medical and health care services through the State Hospitals and the Public Health Division. All of the 704 children known to the Children with Special Needs Program receive the available health care services provided by the state. Primary care services and Specialty consultants - orthopedics (Shriners Hospital), cardiologist, ophthalmologists - who provide itinerant services in the four states are available to children in the CSHN program. The only health insurance program that is available to the population in the FSM is for employees of the National and State governments and their families. It is important to note that with the difficulties in operating the health facilities, some of the states have been proposing new policy for everyone to pay for their services.

National Core Performance Measure #12 - Percent of children without health insurance. *Annual Performance Objective for 2004=10%*

The Annual Performance Indicator for FSM for 2004 is 59.4% average of children without health insurance. Chuuk estimated that 100% of the 27,426 children do not have health insurance, followed by Yap (94%) 4880 out of the 5168 children, and both Pohnpei and Kosrae

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

reported 0, the interpretation of the data are both based on English and local interpretation. Yap and Chuuk follow the English way of answering while Kosrae and Pohnpei based their answers on the local way of answering. Although, the answer is 0, it means 100%. Therefore, the true answer in average is 98.5% of children do not have insurance. FSM is unique in that the State Government provided all medical and health care services through the State Hospitals and the Public Health Division.

The only health insurance program that is available to the population in the FSM is for employees of the National and State governments and their families. In 2004, there were 2,259 children with insurance through their parents' insurance policies. It is estimated that in 2006 more children will have insurance, because of the demands for quality of services and with payment.

National Core Performance Measure #13 - Not applicable for FSM

National Core Performance Measure #14 - The degree to which the State assures family participation in program and policy activities in the state CSHCN Program. *Annual Performance Objective for 2004= 50%*

The Annual Performance Indicator for FSM is 15.5%, which is estimated based on the CSN Survey 2004. CSHN families were asked if they are participating in decision-making and being satisfied with services they received. Out of the total 259 CSN families surveyed 15.5% responded "Yes". FSM MCH and CSN program will continue effort to meet the target objective by collaboration and partnership with other related agencies and sectors. The specific developments had been done and will continue to be included: Family members continue to participate on advisory committees (2), financial support for parent activities (2), family members are involved in in-service training (1), family members of diverse cultures are involved (2). Traditionally, families in the FSM have received health care services, but have not participated in the planning of the service system or in developing the policies of the program. The CSHN Coordinators are continuing to work on involving families by including the parent groups in the interagency agreements, and to include parents in the meetings of the CSHN Interagency Council. The parents in all of the four states have begun to organize and have started parent networks, organization and support groups which have become active in advocating for services for the families and children with special needs.

National Core Performance Measure #15 - Percent of very low birth weight live births. *Annual Performance Objective for 2004= 0.7%*

The Annual Performance Indicator for FSM for 2004 is 0.5%, which has exceeded the targeted objective for the year. During 2004, of the 2415 women who delivered a live baby, there

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

were 11 live born infants with very low birth weight of less than 1500 grams. Although the VLBW indicator for the FSM has been met based on the Year 2010 Objective of 0.9%, FSM should continue its efforts and pay more attention to the nutritional aspects, especially at prenatal period. This number is still represents a high in the number of infant with very low birth weight and in light of the fact that overall 29% of the pregnant women in the FSM in 2004 initiated care in the first trimester and approximately 46% of women received less than the 80% of the required prenatal care based on the Kutelchuk Index of Adequacy of Prenatal. Based on this data, the MCH Programs in the four states are planning activities to bring women in earlier for prenatal care and to assure that continuous prenatal care is provided.

National Core Performance Measure #16 - The rate (per 100,000) of suicide deaths among youths 15-19. *Annual Performance Objective for 2004= 25/100,000*

The Annual Performance Indicator for FSM for 2004 is 63.5/100,000 youths 15-19 years of age is higher than the target objective for the year. This rate is based on officially reported deaths in the four FSM states among the projected estimate of 13,523 youths in the age group for the Year 2004. Yap State reported 3 teen suicide deaths during the year. Kosrae State reported one teen suicide death. Chuuk and Pohnpei reported none or (0).

Teen Suicide Death Rate (Age 15-19) per 10,000						
States	1999	2000	2001	2002	2003	2004
Chuuk	0	27.6	14.8	NR	14.7	0
Kosrae	0	0	106.5	0	106	106
Pohnpei	24.1	0	23.9	0	23.9	0
Yap	0	71.3	74.1	74.1	222	148
FSM	7.3	20.6	30.2	24.7	91.6	63.5
3 Years Average FSM			19.3	25.2	48.8	60

In examining the data for 2002 to 2004, the FSM average indicates slight increase. The individual states indicate high in the smaller states (Kosrae and Yap) and low in the bigger states (Chuuk and Pohnpei). This may not be truth because Chuuk has been the more problems in general suicide. Many suicide cases oftentimes are classified as accident, especially those that happened at home with handguns and shotguns. The doctor who estimated the causes of deaths either classified under, "Unknown" or followed the report from the family members, because it is shameful and embarrassing on the part of the family or clan. It is also the fact that approximately 60 percent of deaths have been registered in the FSM for the past 15 years. Many of these suicide deaths occur in the outer islands and in the remote villages are not reported. Again, suicide is felt that a death due to suicide is not culturally acceptable so that many of these

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

deaths are either not reported or the death is attributed to other causes. In running the 3 years average, it is increasing and with the fact of under reporting, it is significant. MCH will continue working with the Women and Youth officers at both the national and state levels and various local, state and national leaderships to deal with this issue.

National Core Performance Measure #17 - Not applicable for FSM

National Core Performance Measure #18 - Percent of infants born to pregnant women receiving prenatal care in the first trimester. *Annual Performance Objective for 2004= 22*

Percent of Women with Early Prenatal Care						
States	1999	2000	2001	2002	2003	2004
Chuuk	6.9	22.3	11.6	9.1	22.2	18
Kosrae	27.5	35.1	34.8	37	31	41
Pohnpei	6.1	19.9	58.1	57.4	42	18
Yap	21.2	22.9	18.8	26	28	22
FSM	9.7	22.7	32.1	32.4	30.8	24.7
3 Years Average FSM		21.4%	21.5	29.1	31.7	29.3

The Annual Performance Indicator for FSM for 2004 24.7%, which exceeds the targeted objective for the year. This represents a significant increase from 1999 and 2000 when 9.7% women respectively were reported to have received early prenatal care. The running three-year average for the period from 1998-00 shows 21.4% of the women received early prenatal care; whereas the three year average for 1999-01 shows that 21.5% received early care and 29.1% in the 2000-02, 31.7% in 2001-03, and 29.3% in 2002-04 period. In assessing the percentage of early prenatal care rates in the four states in 2004, Kosrae State recorded the highest percentage with 41% (68/168) of the women receiving early prenatal care; Yap State reported 22% (50/225), and Chuuk and Pohnpei both reported 18% (200/1096) and (168/926) pregnant women getting early. Women receiving late prenatal care have been a major problem for many years in the FSM and the increasing trend in the proportion of women receiving early prenatal care is encouraging.

Progress on Outcome Measures

National Outcome Measure #1 - The infant mortality rate per 1,000 live births. *Annual Outcome Objective for 2004= 20/1000 live births*

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

The Annual Outcome Indicator for the FSM for 2004 is 17.5 or 18/1000 live births which has met the targeted objective for the year. In examining the three year running averages for

	1998	1999	2000	2001	2002	2003	2004
IMR	21.5	19.5	17.7	21.8	15.8	22.6	17.5
3 Year Average	19.5						
		19.6					
			18.4				
				20.0			
					18.7		

Three Year Averages - IMR

infant mortality rates between 1998 and 2004, the rate for 1998-00 period is 19.5/1000, the 1999-01 is 19.6/1000, the 2000-02 is 18.4/1000, the 2001-03 is 20.0/1000, and the 2002-04 is 18.7/1000. Base on the 3 years indicator, there is little or no declining trends. It has been more stabilizing at the rate of 19/1000 for FSM. However, examining individual state, each of the state shown slight declining with the

exception of Pohnpei is increasing up in 2004. This could be that the reporting is improving. However, a major concern for Pohnpei MCH program is the high teen pregnancy rate. Interpretation must also considered other factors such as: (1) the confidence level of the validity of the data being reported by the state vital statistics office for both live births and infant deaths is not high; and (2) the statistical anomaly of the small number problem where one event either way can change the rate dramatically. The calculating of the three year running averages does tend to even out the fluctuations in the data. Because of the small numbers of live births and the small numbers of infant deaths, it is difficult to show any relationship between the accomplishments achieved with the performance measures and the decrease in the infant mortality rates. It is anticipated that with the addition of the MCH Data Clerks (through the SSDI Project to improve the state data capacity) to assist in the completion of the birth certificates and the infant death certificates that the validity and accuracy of the number of infant deaths will increase.

The IMR varied widely among the four states with Chuuk state have been having the highest rate for the past at least five years in average of 27/1000 Live births. For the year 2004,

Yap reported 27/1000 live births lead over Chuuk at 20.1/1000, followed by Pohnpei (13/1000 LB) and Kosrae with (11.9/1000 Live birth). The primary causes of death included: 5 premature, 5 infections (gastroenteritis, respiratory infection), and 1 meconium aspiration. In Chuuk state there

	FSM	Chuuk	Kosrae	Pohnpei	Yap
2002	15.8	24.6	24	7.5	7.3
2003	22.6	22.2	38	3.1	27

were 36 infant deaths recorded in 2001 of which 20 were in the neonatal period and 16 in the postneonatal period. The primary causes of death included: 20 infection (gastroenteritis, respiratory infection), 6 premature, 5 meconium aspiration, 2 injury, 2 malnutrition, and 1 asphyxia. For Pohnpei state there were a total of 11 infant deaths during 2000 and 2001 of which 9 were in the neonatal period and 2 in the postneonatal period. The primary causes of death include: 7 premature, 3 congenital anomalies (2 heart disease (VSD) and 1 anencephaly), and

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

one respiratory infection.

National Outcome Measure #2 - The ratio of the black infant mortality rate to the white infant mortality rate. *Annual Outcome Objective = NA*

National Outcome Measure #3 - The neonatal mortality rate per 1,000 live births. *Annual Outcome Objective for 2004=14/1000 live births.*

The Annual Outcome Indicator for the FSM for 2004 is 14.7/1000 live births and has exceeded the performance for the targeted objective for the year; however, care must be taken in interpreting the data because of the problems of calculations with the small number of neonatal deaths. During 2004, there were a total of 32 neonatal deaths that were reported from the four states with Chuuk state reporting 16 of the deaths. In examining the three year running averages between 2000-2004, for the time period 1999-01, the rate was 7.1/1000, for 2000-02 the rate was 7.2/1000, for 2001-03 the rate was 8/1000, and the 2002-04 with the rate of 5.6/1000 live births. See discussion for National Outcome Measure #1 for detail on causes of death.

National Outcome Measure #4 - The post neonatal mortality rate per 1,000 live births. *Annual Outcome Objective for 2004= 6 live births.*

The Annual Outcome Indicator for the FSM for 2004 is 4.6/1000 live births, which is within the expected performance for the year; however, care must be taken in interpreting the data because of the problems of calculations with the small number of neonatal death. During 2004, there were a total of 11 post neonatal deaths that were reported from the four states with Chuuk state reporting 6 of the deaths, account for about 50% of all FSM. In examining the data for 2000-2004, there was a decreasing trend from 2001 with 12.1/1000 and with the 4.6/1000 live births in 2004. In examining with the 3 Year average, there is a slid decreasing trends but not significant.

The Post Neonatal Mortality Rates (per 1000 Live Births)

States	1999	2000	2001	2002	2003	2004
Chuuk	5	5.1	19.1	11	8.3	5
Kosrae	10.6	5	10.1	5	10	6
Pohnpei	6.5	2.5	3.1	7.5	3.1	3.2
Yap	0	3.8	17.9	0	4	4.4
FSM	5.5	3.7	12.1	5.8	6.3	4.6
3 Year FSM			7.1	7.2	8	5.6

Further analysis of the linked infant birth and death certificates will be conducted to determine the reasons for the increases in the rates. See discussion for National Outcome

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

Measure #1.

National Outcome Measure #5 - The perinatal mortality rate per 1,000 live births + fetal deaths. *Annual Outcome Objective for 2004= 38/1000 live births + fetal deaths*

The Annual Outcome Indicator for the FSM for 2004 is 38.5/1000 live births + fetal deaths which little over the expected performance for the year. In assessing the data for the four states, the State of Pohnpei had the highest rate with 56 perinatal deaths (56.4/1000 live birth); followed by Yap with 8 perinatal deaths (35/1000 live birth + fetal deaths), Kosrae with 6 (34.9/1000 live births + fetal deaths) and Chuuk State with 31 perinatal deaths (27.8/1000 live births + fetal deaths). The data for state's perinatal mortality rates with the percent of women who received early prenatal care and the percent of women whose observed to expected prenatal visit ratio is greater than 0% was compared to see if there were any association between these factors. There does not appear to be a relationship between perinatal mortality and early prenatal care in that Chuuk state with the lowest perinatal mortality rate also had the lowest percent of women receiving early prenatal care and Pohnpei had both the highest perinatal mortality rate and percent of women receiving early prenatal care. There may be a relationship between perinatal mortality and the number of prenatal care visits in that Chuuk state with the lowest perinatal mortality had the highest proportion of women who received more than 80% of the observed to expected prenatal visits and Pohnpei with the highest perinatal mortality had the lowest proportion of women receiving prenatal care visits. Further epidemiological analysis of the data will need to be performed to determine the significance of the rates.

National Outcome Measure #6 - The child death rate per 100,000 children aged 1-14. *Annual Outcome Objective for 2004=70/100,000*

The Annual Outcome Indicator for the FSM for 2004 is 76.1/100000 children aged 1-14, which is above the expected performance for the year. During 2004, the four states reported a total of 24 childhood mortalities between the ages of 1-14 out of a population of 40,752 children 1-14 years of age based on the FSM census data projection for 2004 base on 2000 Census. In examining the 2004 data by states, Kosrae State recorded the highest rate with 175.3/100000 (5 out of 2852 children 1-14 years of age), followed by Chuuk with 73/100000 (15 out of 20,539 children 1-14 years of age), Pohnpei with 30.6/100000 (4 out of 13084 children 1-14 years of age) and Yap 0 (0 out of 3813 children 1-14 years of age).

Because of the small base population, it is difficult to determine whether the data of child deaths reflects a significant increase in the number and rate of deaths or if this is due to a situation of data reporting. Because of the wide variations from year to year, three year running averages for 2000-2004 were calculated and reveals that the mortality rate for 1998-00 was 45.3/100,000, the 1999-01 was 55.8/100,000, the 2000-02 was 37.1, the 2001-03 was 74/100,000, and the 2002-2004 was 73.7/100,000.

The Child death rate per 100,000 children aged 1 through

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

14.

States	1999	2000	2001	2002	2003	2004
Chuuk	24.5	49.1	82.8	5	199.7	73
Kosrae	74.7	0	70	0	70	175
Pohnpei	29.8	124.6	76.9	28.5	14.3	30.5
Yap	24.4	24.7	52.5	78.7	184	0
FSM	30.3	60.2	77.1	28.1	117	76.1
3 Years FSM		45.3	55.8	37.1	74	73.7

There appears to be a slight increasing trend; however, It is too early to determine whether trends have been established and data will need to be collected for a few more years.

5. Identify Activities

The Annual Plan for FY 2006 for the Federated States of Micronesia is based on selected performance and outcome measures at both the national and at the state levels for each of the level of service. The population groups will describe the activities for each of the levels of the services.

DIRECT HEALTH CARE SERVICES. The activities will focus on the state negotiated performance measure that include: (1) Infants who are exclusively breastfed at six months of age, (2) Pregnant women receiving nutrition education and counseling during their pregnancy, (3) Caretakers of infants who receive education and counseling related to feeding and nutrition of infants.

For pregnant women and mothers, the Title V programs in all the four FSM states will continue to provide direct health care to all pregnant women who initiate prenatal care at each State Public Health, regardless of the trimester they enter to the system. These direct health cares include the basic and routine prenatal care for first visits and revisits and high-risk prenatal care. Other direct health care includes weight and blood pressure monitoring, all laboratory services, such as urinalysis, complete blood counts at no cost to the women. After the delivery, mothers are counseled on family planning methods and those who decide on using a family planning method are given their choice of contraceptives also at no cost. Staff whose salaries are borne by the MCH Title V Program or the Family Planning Title X Program provides the cost of contraceptives and family planning services. Contraceptives are provided by Title X and the United Nations Population Fund (UNFPA), which complements all US Title X programs throughout the Federated States of Micronesia. Other direct care services include the provision of education to the mothers on the importance of exclusive breast-feeding (this is done by MCH staff and other public health nurses during prenatal care services and post-partum visits). The MCH program will continue to provide all these services at the Public Health clinics. Yap and Pohnpei States have begun extending follow up prenatal services to the outlying dispensaries. High-risk women are encouraged to return to Public Health clinic at

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

the central health center due to lack of laboratory capability and other specialized services available in the out-lying dispensaries.

For **infants and children**, the promotion of exclusive breast-feeding is an FSM –wide initiative, which requires all newborns to be put to breast shortly after birth, right in the delivery room. The FSM MCH Program has joint international efforts to promote exclusive breastfeeding for newborns and infant up to six months of age. Some of the international activities include submitting and passing legislation on the International Marketing of Breast Milk Substitutes. By joining efforts with UNICEF and WHO, the MCH Title V Program supports the Baby Friendly Hospital Initiative. All State Hospitals currently have existing policies encouraging exclusive breastfeeding for six month and prohibiting baby bottles and teats from being brought to the hospitals. This policy will continue to be enforced to maintain the high level of mother discharged from the hospitals that are breastfeeding their infants. The FSM SSDI Project is in the process of developing an expanded well baby clinic visit. Mothers with infants under six months of age will be encouraged to continue to exclusively breastfeed. Also part of the system will include the development of a Well Baby Clinic Form that will collect the appropriate data and the development of a computerized well baby care database.

Another major activity of the SSDI Project will address the problem providing the caretakers of infants with anticipatory guidance and education by developing a system of the expanded well should be expected for children who may have handicapping conditions and who may be eligible to receive individualized services appropriate to their health or medical problems. With the development of the expanded well baby/well child clinic, two components of the services will assist in the early identification of children with suspected handicapping conditions. One of the components will be the developmental screening of all infants up to 18 months of age to screen for developmental delay; and the other component is the performance of physical examinations by the nurses. These activities will assist in the earlier identification of children who are suspected of having handicapping condition.

ENABLING SERVICES. The activities will focus on national and state performance measures: (1) Children in the CSHN Program who have a “medical/health home”. (2) Children with Special Needs who have a completed reevaluation by the CSHCN Team.

For pregnant women and mothers, the MCH Program will increase their efforts to provide outreach services to remote areas to assure the initiation of early and continuous prenatal care. With continuing low rates of women receiving early and adequate prenatal care coupled with the high rates of infant mortality and fetal mortality, the promotion of early and continuous prenatal care is important in improving the health outcomes of infants and children. Yap state will plan to provide training for women from the outer islands and the remote villages on Yap Proper. The training will include the basics of prenatal care, screening, nutrition education, and breastfeeding.

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

For infants and children, the MCH Program will maintain their efforts to provide outreach services to remote villages and outer islands to assure that children are provided with health screening services and immunization services.

For children with special needs, the four FSM states will continue to assure that every child in the CSHN Program has a “medical/health home”. Because of the unique situation in FSM, all medical and health care services are provided by each State Hospital and the Public Health Division. When a child is referred and accepted in the CSHN Program, the CSHN Physician becomes the primary physician. In addition, because of the close working relationship between the CSHN Program and the MCH Program, all preventive health care services provided to well babies and children are provided to all children with special needs. The CSHN Program will continue to provide home visits and outreach services for children with special needs who have difficulty accessing the CSHN Clinic for assessment and follow up due to transportation problems. For example in Chuuk state, some of these families live on the lagoon islands and it may be necessary to take a one-hour boat ride to the island.

During 2001, the CSHN data show that the CSHN Program is not receiving the number of referrals as should be expected for children who are suspected of having a handicapping condition and who may be eligible to receive individualized services appropriate to their health or medical problems. With the development of the expanded well baby/well child clinic, two components of the services will assist in the early identification of children with suspected handicapping conditions. One of the components will be the developmental screening of all infants up to 18 months of age to screen for developmental delay; and the other component is the performance of physical examinations by the nurses. These activities will continue to be reinforced and encouraged to assist in the earlier identification of children who are suspected of having a handicapping condition.

The CSHN data also show that children are being referred to the program, receive an initial evaluation and are provided the initial services and children are receiving follow-up for individual medical problems; however, a comprehensive annual re-evaluation is not being conducted. In order to better document the progress and improvements that a child has made as well as to identify any new special needs that may have developed, a comprehensive re-evaluation for children in the CSHN Program should be conducted on an annual basis. The plans for this year will be to continue to schedule appointments for children who have not received a re-evaluation within 12 months of the original evaluation. The policies, the procedures, the format, and the forms for conducting comprehensive evaluations have already been developed and are in place.

POPULATION BASED SERVICES. The activities will focus on the following national and state performance measures: (1) Women receiving services in the MCH Program who receive a Pap smear screening. (2) Pregnant women screened for Hepatitis B surface antigen, (3) Immunization rates of 2 years old children, (4) Teen-age birth rates, (5)

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

Protective sealants in third grade children, and (6) Mortality rates of children 1-14 due to motor vehicle injuries.

For pregnant women and mothers, the MCH Program will continue to offer Pap smear screening services to women who received services in one of the MCH Program including family planning services, first prenatal care visits, post-partum clinics. The MCH Coordinator and Family Planning Coordinator will also monitor the results of the Pap smear and will assure the appropriate and timely referral of women with positive Pap smears and to assure appropriate and timely treatment for those who have a confirmed diagnosis.

Between 25% to 50% of children infected before 5 years of age become carriers, whereas only 8% - 10% of acutely infected adults become carriers. Therefore, prevention strategies for populations in which HBV infection is endemic are directed at vaccinating infants with Hepatitis B vaccine, usually within 24 hours after birth, to prevent both prenatal and childhood transmission of infection. Because the prevalence of hepatitis B infection is high among the population in the FSM, the MCH Program will continue to assure that all pregnant women are screened for Hepatitis B surface antigen and the infant of any women with a positive screen shall receive HB Immune Globulin followed by the immunizing infants with the Hepatitis B vaccine.

In an effort to curtail the rising birth rate to teen age women, the MCH Program will collaborate with the Family Planning Program and conduct at least one youth seminar on family planning awareness, and to continue to refer teenagers to the Family Planning Program for counseling and education. The MCH Program will provide pamphlets on family planning methods to the teenagers who are encountered at any of the MCH clinics and will provide family life education at the schools, and will continue to include family planning services as part of the MCH program when going out to the field when providing other services.

For **infants and children**, the MCH Coordinator will continue to work in collaboration with the Division of dental Services to apply sealants on at least one permanent molar tooth for the third graders. The MCH Program will provide the portable equipment, dental units, and the sealants and the Dental Division staff will provide the professional services to go into the schools and provide protective sealants on molars of third grade children.

In 2002 there were 25.1 deaths of 1-14 year old children due to motor vehicle injuries reported; however, in 2004 there were 21 recorded deaths. These vehicle crashes involve mostly adults who were driving while under the influence of alcohol. In FY 2006, the MCH staff will continue working closely with the Mental Health Program in each of the four states to educate the public on the dangers involved in drinking alcohol and driving.

FEDERATED STATES OF MICRONESIA

Needs Assessment 2005-2010

Preventing vaccine preventable illness and death in children through an active and comprehensive immunization program is one of the major efforts of the MCH Program. The staff of the MCH Program will focus on increasing the number of outreach services to provide immunizations to the outer islands, lagoon islands, and remote villages.

There are no population-based services planned for the children with special needs population.

INFRASTRUCTURE BUILDING SERVICES. The activities will focus on the following national and state performance measures: (1) Children in the Head start Program who have been screened for diseased, missing, and filled teeth, and (2) Development of a preventive dental health program in MCH, (3) Suicide deaths among youths, and (4) Infants born to mothers receiving early prenatal care.

For pregnant women and mothers, one of the major problems is the fact in 2004, only 14.7% of the mothers who delivered an infant initiated care in the first trimester. In order to increase the percentage of pregnant women receiving early prenatal care, the MCH Program is planning to provide prenatal care services in the communities. Currently, the majority of the prenatal services are provided at the Public Health Clinic at the central hospital facility only and women from the rural areas have difficulty with transportation and childcare. Services will include (1) counseling pregnant women who come in late to come in early during their next pregnancy; (2) the use of ultrasound to confirm the pregnancy and to confirm the gestational age; (3) constant and frequent public announcements on the importance of early prenatal care.

For infants and children, the MCH Program will work in collaboration with the Early Childhood Education Program (formerly Head start Program) and the Division of Dental Health to survey the status of dental disease among children attending the Early Childhood Education Program. The purpose of this survey is to determine the magnitude and the severity of the dental problems in Early Childhood Education (ECE) children that will assist in the development of a preventive dental health education program.

Another major activity of the MCH Program will be the further development of the expanded well baby care system of services. During 1999, the Well Baby Care Policy and Procedure Manual were developed with clinical forms and data collecting forms. A Newborn Registry database was developed as a central registry for scheduling and monitoring appointments. For FY 2006, some of the main activities will be the introduction of growth monitoring with plotting of measurements on the growth curve, routine developmental screening, and the development of parent education modules.

For children with special needs, the staff of the CSN Programs will continue to evaluate and improve the system of care for children with special needs. Some of the activities that are planned for FY 2006 are the evaluation of the procedures of the

FEDERATED STATES OF MICRONESIA
Needs Assessment 2005-2010

interdisciplinary team conducting service plans, the re-negotiation of the interagency agreement and the creation of a national interagency committee.

6. Allocate Resources and Monitor Progress

The findings from the FSM-SLAIT type survey and the FSM MCH Program needs assessment conducted this year lead to some important deficiencies, within the health care system, and to some specific health issues that the MCH Program focused its resources and activities as its priorities. The issues that were noted in the needs assessment were also augmented by recommendation from other experts to the FSM government for the need to provide coordinated and persistent array of social, medical and preventive services to improve the health of the women, mothers, infants and children who make up at least 90% of its total population. In its accession to the Convention on the Rights of the Child, FSM government committed itself to this convention and tasked the FSM Department of HESA, the Title V Agency, as the lead agency.

In addition, the MCH Program Coordinator was made a key member of the President's Advisory Council to the CRC. In this partnership, the MCH Program is relied on as the lead program in providing recommendation. Likewise, the MCH Program also benefits from such arrangement in that it was able to align and maximize networking resources to achieve the priorities it set for its program activities.

In May 2005, the MCH and the Special Education Programs conducted their 3rd annual Joint Workshop in Kosrae State. Representatives from both the National and State MCH and Special Education programs and other collaborating departments and agencies attended this four-days workshop. The underlying goal of the workshop was to find ways where the two programs can collaborate and in partnership improve early intervening services for infants and toddlers and their families. Also, during the workshop, the MCH Program coordinators and staff from each of the FSM States and the National discussed issues such as AMCHP meetings, legislative updates, and writing of work plans. The work plans set out what each of the MCH Program coordinators would do for the priorities already set out. Together, they reviewed the work plans, discuss ways to track progress, and agreed on timeline for reports to be submitted. When the agreement was made, the FSM National MCH Program allotted the funds to the respective State MCH Programs to carry out the activities. Unless the FSM Government says otherwise, this system will be followed in allotting funds to the respective State programs. The process in setting work plan will also be followed.

The next needs assessment will lead to the next set of priorities. In addition, the next needs assessment will also enable the MCH Program to re-evaluate its current priorities and what priorities is should set for the next future intervention years.

FEDERATED STATES OF MICRONESIA

Maternal & Child Health Program Additional Activities for Adolescents

A. Direct Care Service

The MCH Family Planning Program worked with the Community College in establishing the Youth Wellness Center for the Youths to get the services as counseling for behavioral risk like HIV/Aids/STI, Drugs and Alcohol and to offer the Youths in accessing the contraceptives for prevention of pregnancy and infection. Total number of youths using this Youth Wellness Center approximately 200 youths and we would like to increase by 5% in the next year. Data also showed for 2004 that there is 22/1000 Teen births. There is a need to increase the awareness of this Youth Wellness Center to the Youths at the community college and also at High School by working closely with the peer group counseling office to encourage the students to utilize the center.

- Screening B/P, height & weight, PPD
- Screening STI (RPR, HIV, HB, GC, Chlamydia, trichomonas & other sexually transmitted disease).
- Screening Pap
- Screening breast cancer, prostate cancer and others
- Vision testing
- Check up Hct/hemoglobin, blood typing, stool, urine
- Do dental check-up & fluoride treatment
- Treat high blood pressure, STI, anemia, positive stool, urine and Paps
- Provide counseling to all services provided
- Treat Vitamin A deficiency
- Store tobacco inspections by youth.
- Clinics conducted for mentally ill patients and families.
- Tobacco inspections conducted of all stores to enforce law against selling of Tobacco/Alcohol Inspection took place.

B. Enabling Services

The concern for the State especially for the Youths is regarding accessibility to care and we do have outreach services to reach the youths in the community through availability of the Primary and prevention care services. MCH with Other Public Programs like Family Planning HIV/Aids/STI and Mental Health do outreach to the outlying areas in Chuuk in working with the youth organization both in the community and church on educating youth on different issues. The cultural acceptability of our programs is a major issues. The community culture for educating youths on sexuality and use of drugs is still a taboo in our culture. We need to be sensitive to the culture by separating the genders during our outreach education or training. The impact

of the emerging issues such as drugs use, health insurance majority of our youths are not accessible to health insurance but all the primary health care services is free for this population.

- Provide health education to all adolescent coming to health centers, both at the center & the community.
- Workshops both in schools and the community
- Produce posters/pamphlets/brochures (educational materials)
- Substance Abuse Workshops to high school age youth.
- Develop billboards for youth education and displayed in public areas.
- Develop posters on youth related issues.
- Radio news magazine for the general population on drug awareness.
- All vendors receiving tobacco packets containing health and law material regarding alcohol and tobacco access to minors.
- Weekly radio net to follow-up on mental health patients in Outer Islands.
- Mental health and substance abuse workshop for dispensary managers and nurses.
- Presentation to youth clubs of not less than 25 members received STD/HIV health education.
- STD/HIV presentation to outer islands high school covering 95% of the student body.
- Develop and distribute STD/HIV health education booklet for Yap proper and outer islands students and youths.
- Conduct radio news magazine on substance abuse target for the youth
- Radio discussion on Tobacco presented.
- Radio spots both in Yapese and English language geared towards 100% of the state population on substance abuse education.

C. Population Based Services

The MCH Program worked with the Community College of Micronesia to do a Youth survey to find out the Youth Awareness of the Youth Wellness Center. The purpose of the survey is to get the youths feedback on our services available for them and to improve the services from the findings of the survey. Number of Youths participated in the survey were 34 and 29% said they did not know the services and 58% responded that they knew the services. The problems that prevented the youths from using the services were following like they did not complete high school, being lazy, they still like to play around with their peers, still like to smoke, drink and are not interested, very shy, were not aware, do not trust staff, busy at home and not important for them. This is the result of the survey which gave us input on how to improve the Youth Wellness Center. The MCH Program is coordinated with the College, Education Department, Mental Health and other Agencies that deal with the Youth Matter like the NGO's like the church and Youth Organization.

- School Physical Examination
- Deworming
- Immunization
- Health Education & Awareness Program
- Workshop conducted on alcohol, cigarettes, marijuana, ice and other drugs in the communities.
- Drug free presentations to elementary Schools.
- Community drug free summer sports program.
- Radio news magazine for the general population on drug awareness.
- Essay contest for junior high school.
- Anti-tobacco campaign for school population.
- School essay contest on substance abuse.

D. Infrastructure Building Services

The State 's capacity to promote comprehensive systems of services for the Youths is through the Health Services Primary Care Services available to provide counseling and screening in HIVAID /STI, Family Planning providing contraceptives to prevent Teenage Pregnancy and infection.

- ❖ 6 MCH staff development program
 - Workshop
 - Conferences
 - Trainings
 - Both off-island & in-service to upgrade & updated all MCH staff
 - The State's capacity to promote comprehensive systems of services for the Youth is through the Health Services Primary Care.
 - Services available to provide counseling and screening in HIV/AID/STI, Family Planning providing contraceptives to prevent Teenage Pregnancy and infection.
 - Schools and community workshops.
 - Drug Awareness Week Presentation.
 - Peer Counselor Training.